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ABSTRACT

This collection of readings (mostly from "Educational Leadership") is directed to leaders in educational settings who are responsible for curriculum development, professional growth, and improving instruction. The selections are organized under eight topics: (1) history, nature, and purposes of educational supervision; (2) organization for supervisory services; (3) human skills in supervision; (4) supervisory techniques for planning and managing educational programs; (5) the supervisor as facilitator in the improvement of teaching and learning; (6) the supervisor as leader in curriculum development; (7) the supervisor as a leader in staff development; and (8) the supervisor as a researcher and member of the profession. For each of these major topics, an overview introduces selected readings. The overview establishes the contribution and relationship of that topic to educational supervision and provides questions in order to direct the reader to the interaction between the articles. There is also a "Guide for Readers," designed to aid instructors and students. In the form of a matrix, the guide lists nine major textbooks in the field of educational supervison and shows the intersection with the articles in this collection. Resources are included in each separate article. (LMS)

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readings in educational supervision

volume 2

Compiled by Ray E. Bruce
and Edith E. Grimsley

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and Curriculum Development

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Foreword

FOR FOUR DISTINCT AND SIGNIFICANT REASONS I CONSIDER IT A great privilege and source of pride to commend this second volume of *Readings in Educational Supervision*.

Commemoration

The book's preparation this year coincides with ASCD's renewed emphasis on and commitment to leadership and supervision. This publication complements our 1987 Yearbook in contributing to the sustained support of this current focus of the Association's Five-Year Plan. Critics, including myself, often urge that greater attention be devoted to leadership in general and supervision in particular. Nevertheless, ASCD historically has been almost the sole voice providing effective advocacy for both. Specific resources such as this volume are essential to transform aspirations into reality. These *Readings* promise to extend, enhance, and enrich our efforts in this area.

Continuity

This volume provides a benchmark and status report on the field of educational supervision. This is the third time that collections have been synthesized from articles that originally appeared in *Educational Leadership*. The first, published in 1969 under the title *Supervision: Emerging Profession*, represented the decade beginning in 1969, during which ASCD was a force toward professionalism and professionalization. The 65 articles comprising that original anthology, edited by Robert R. Leeper, were arranged within each of five major sections "partly in chronological order and partly in accordance with the special aspects of the topics treated." The book addressed "Leadership: Talent for Growth," "Issues in Professionalization," "Research: Instrument for New Knowledge," "The Supervisor at Work," and "Supervision: Its Potential."

In their 1982 work, the second such anthology, Grimsley and Bruce aggregated 42 articles published from 1976 through 1982. They arranged them under nine topics and added the dimension of keying to those topics the 42 articles, the content of 13 major textbooks in supervision, and the 1982 ASCD Yearbook, *Supervision of Teaching*.

This new edition contains three selected chapters from that same Yearbook along with 38 articles from *Educational Leadership*. The editors reference the collected articles to the eight topics they have defined for educational supervision and to nine current textbooks in that field. Viewed in sequence, these ASCD anthologies of 1969, 1982, and 1987 provide perspective and perceptions on the development of the broad categories that constitute educational supervision.

Character

While out of diversity often comes unity, such is not always the case. Like the membership of ASCD itself, supervision as a field of study embraces many viewpoints and speaks with many voices. Some believe that its influence with educators and lay citizens would be greater if agreement could be reached on common principles. But to the trained ear there already exists far more harmony than cacophony. This book of readings offers the elements of educational supervision in several categories while preserving within the articles the commentary of the various authors. Although intended primarily as a supplement to the textbooks with which its content has been carefully linked, this publication stands on its own merits as a versatile resource. It is an approach to and documentation for the key aspects of the field of educational supervision as it presently exists. The richness may be more in the form of a quilt than a tapestry, but such is the character of a dynamic, changing, and vital enterprise.

Competency

Perhaps most significantly, this book provides a viable connection between theory and practice which confounds any human endeavor. The authors are themselves scholars in the field and intimately acquainted with its literature as well as with emerging trends and current issues. They are both senior faculty members teaching advanced graduate students at a major research university. They are practitioners of their craft and in numerous forms—practica, internships, staff development programs, and projects—interact on a daily basis with their

students, who are testing their concepts in leadership positions of school systems, intermediate units, state education departments, professional organizations, and numerous educational agencies. I have been privileged to serve for over 14 years with the authors—as friend and colleague—and I place unqualified confidence in their judgment.

Conclusion

In summary, I congratulate the Association for inaugurating during my term as President within its Five-Year Plan new emphasis on leadership and supervision.

I congratulate also the authors for making available to my own students an impressive, accurate, and appropriate documentation of the continuing evolution of this field of study and its progress toward true professional status. I'm also proud to be identified as a contributing member of my craft by having an article included with the distinguished company in this edition.

I'd like to note finally that this is not merely a publication about educational supervision. It is a series of windows through which to observe the field in operation. I share with its authors my admiration for a job exceedingly well done.

Gerald R. Firth
ASCD President, 1986–87

Introduction

THIS COLLECTION OF READINGS IS ADDRESSED TO LEADERS IN educational settings who work with teachers and others to improve the program for learners by fostering curriculum development, promoting professional growth, and improving instruction. This book will also appeal to students who wish to explore the scope of educational supervision and to all who see educational supervision as an essential function in effective schools. This book has been prepared to update an earlier effort by us in 1982 to address those same purposes.

The inclusion of the term educational supervision in the title of this book was deliberate. This term signals a definition of supervision for schools that demands leadership for curriculum development and staff development as well as for the generally accepted area of instructional improvement. In school districts throughout the country, "supervisors" have primary responsibility in those three task areas. In larger districts, the task areas may be separate assignments, but in a great many more one individual is responsible for all three. In the absence of "supervisors" it is these areas which suffer most from lack of attention. Readers who reject this view of supervision will still find some of the articles directly helpful and others instructive. Readers who argue for colleagueship in supervision, and those who endorse developmental supervision, will be able to find in this collection articles to support and elaborate their supervisory orientations.

The selections presented here are organized under eight topics:

(A) history, nature, and purposes of educational supervision
(B) organization for supervisory services
(C) human skills in supervision
(D) supervisory techniques for planning and managing educational programs
(E) the supervisor as facilitator in the improvement of teaching and learning
(F) the supervisor as leader in curriculum development
(G) the supervisor as leader in staff development
(H) the supervisor as a researcher and member of the profession

These topics are those most frequently addressed by writers of textbooks on educational supervision and by instructors who teach courses that provide an introduction or orientation to the field of general supervision in schools. Practitioners will see Topic A as related to the historical background of supervision and the unique responsibilities of the function of supervision. Topic B will help them explore the ways in which schools and school systems organize to deliver supervisory services. They will recognize Topic C as a crucial skill area in their day-to-day work with people. Practicing supervisors will find in the remaining topics, D through H, articles directed toward their primary responsibilities.

A brief overview introduces the set of selected readings for each topic. In each overview the topic is introduced and an attempt is made to establish the contribution and relationship of that topic to educational supervision. In addition, the overview invites the reader to the articles through questions keyed directly to each of the articles and designed to stimulate interaction and reaction.

Each of the articles has been published in either *Educational Leadership* or in the 1982 ASCD Yearbook, *Supervision of Teaching*. The attention of writers to topics related to educational supervision has increased since the first volume of *Readings in Educational Supervision*. A wealth of material elaborating those interests has been offered in ASCD publications in recent years. We enjoyed a wide range of choices in materials published in 1982 and more recently. Selections from each of the years from 1982 through 1987 are included in these 41 articles, with more than half of them dating from 1985, 1986, and 1987. The authors include practitioners of supervision and prominent writers and opinion shapers in the field.

The section of the book immediately following this introduction is the "Guide for Readers." It is designed to be of particular help to instructors and students in graduate courses in educational supervision. It includes a matrix in which the nine major textbooks in the field of educational supervision published in 1983 and more recently are keyed to the topics and, through the topics, to the articles in this book.

It has been our purpose to glean from the articles

recently published in *Educational Leadership* and in other ASCD publications those which have most to offer to students of educational supervision and to practitioners in the field. We have sought to organize those articles to focus on major areas of interest within educational supervision and to stimulate consideration and discussion of those areas. We are persuaded that the impact of appropriately grouped articles is far greater than that of the articles considered separately. We invite the reader to study with us and to be the judge of the appropriateness of our selections and our groupings.

RAY E. BRUCE, Professor, and
EDITH E. GRIMSLEY, Professor,
Department of Curriculum and Supervision,
The University of Georgia, Athens

Guide for Readers

In the following pages, the content of the nine publications listed below has been keyed to the eight topics that provided the outline for this book. The topics were defined from the content normally addressed in an introductory graduate level course in educational supervision. The articles in this book have also been selected—and grouped accordingly—for their relationship to those same eight topics.

For each of the nine books, the chapters have been matched in a matrix format to the corresponding eight topics. The user of any one of the nine books can therefore turn to the matrix entries prepared for that volume and determine the portions of the book related to each topic and the articles chosen to elaborate that topic. In like manner, the reader can move from any one of the eight topics to the appropriate chapters in one or more of the nine books.

Glickman, C. D. *Supervision of Instruction: A Developmental Approach*. Allyn and Bacon, 1985.

Harris, B. M. *Supervisory Behavior in Education*, 3rd ed. Prentice-Hall, 1985.

Hoy, W. K., and P. B. Forsyth. *Effective Supervision: Theory Into Practice*. Random House, 1986.

Lovell, J. T., and K. Wiles. *Supervision for Better Schools*, 5th ed. Prentice-Hall, 1983.

Marks, J. R., E. Stoops, and J. King-Stoops. *Handbook of Educational Supervision: A Guide for the Practitioner*, 3rd ed. Allyn and Bacon, 1985.

Olivia, P. F. *Supervision for Today's Schools*, 2nd ed. Longman, 1984.

Sergiovanni, T. J., and R. J. Starratt. *Supervision: Human Perspectives*, 3rd ed. McGraw-Hill, 1983.

Tanner, D., and L. Tanner. *Supervision in Education: Problems and Practices*. Macmillan, 1987.

Wiles, J., and J. Bondi. *Supervision: A Guide to Practice*, 2nd ed. Charles E. Merrill, 1986.

Topics in Educational Supervision

Book	A History, Nature, and Purposes of Educational Supervision	B Organization for Supervisory Services	C Human Skills in Supervision	D Supervisory Techniques for Planning and Managing Educational Programs
Glickman, C. D., **Supervision of Instruction: A Developmental Approach**, Allyn and Bacon, 1985	**Chapter One** Supervision for Successful Schools **Chapter Nineteen** Development, School Success, and Cathedrals		**Chapter Six** Supervisory Behavior Continuum: Know Thyself **Chapter Seven** Nondirective Behaviors **Chapter Eight** Collaborative Behaviors **Chapter Nine** Directive Behaviors **Chapter Ten** Applying Interpersonal Skills to Characteristics of Individuals and Groups **Chapter Seventeen** Group Development	**Chapter Eleven** Assessing and Planning Skills
Harris, B. M., **Supervisory Behavior in Education**, 3rd ed., Prentice-Hall, 1985	**Chapter One** The Instructional Supervision Function	**Chapter Six** Organizing and Staffing for Supervision	**Chapter Two** Dynamics of Supervisory Behavior **Chapter Four** Activities for Supervision **Chapter Five** Program Implementation Strategies	**Chapter Three** Systems for Operationalizing Supervision Programs
Hoy, W. K., and P. B. Forsyth, **Effective Supervision: Theory into Practice**, Random House, 1986	**Chapter One** A General Model for Effective Supervision **Chapter Two** A Systems Model of Performance	**Chapter Four** Formal Organization of Schools **Chapter Eight** Organizational Context: An Application	**Chapter Five** Informal Organization in Schools **Chapter Six** Leadership **Chapter Seven** Organizational Climate	
Lovell, J. T., and K. Wiles, **Supervision for Better Schools**, 5th ed., Prentice-Hall, 1983	**Chapter One** Instructional Supervision: Organizational Behavior System **Chapter Two** The Evolvement of Instructional Supervision	**Chapter Eleven** The Supervisory Team at the School District Level: Its Organization and Functions **Chapter Twelve** The Supervisory Team at the Local School	**Chapter Three** Supervision Is Releasing Human Potential **Chapter Four** Supervision Is Leadership **Chapter Five** Supervision Is Communication	**Chapter Six** Supervision Is Coordinating and Facilitating Change **Chapter Thirteen** Organization and Operation of the Faculty

Topics in Educational Supervision

E **The Supervisor as Facilitator in the Improvement of Teaching and Learning**	F **The Supervisor as Leader in Curriculum Development**	G **The Supervisor as Leader in Staff Development**	H **The Supervisor as a Researcher and Member of the Profession**
Chapter Twelve Observing Skills **Chapter Fourteen** Direct Assistance to Teachers	**Chapter Sixteen** Curriculum Development	**Chapter Four** Contrasting Optimal Adult Development with Actual Teacher Development Clues for Supervisory Practice **Chapter Fifteen** In-Service Education	**Chapter Five** Supervisory Beliefs and Reflections on Practice **Chapter Thirteen** Research and Evaluation Skills **Chapter Eighteen** Action Research: The Integrating Task for Schoolwide Improvement
Chapter Seven Observing and Analyzing Instruction **Chapter Eight** Evaluation of Instructional Programs **Chapter Ten** Observation Applications		**Chapter Eleven** Programs in Action **Appendix B** Specific Performances by Competency for the Inservice Area	**Chapter Nine** Supervisors at Work **Appendix A** Competency Statements for Supervisory Performance
Chapter Three The Supervisory Process **Chapter Nine** The Teacher **Chapter Ten** The Student **Chapter Eleven** The Classroom Climate **Chapter Twelve** Formal Classroom Arrangements **Chapter Thirteen** The Teaching Task **Chapter Fourteen** Classroom Performance **Chapter Fifteen** The Classroom Social System: An Application			
Chapter Seven Collaborative Supervision: A Delivery System for Supervision **Chapter Nine** Clinical Supervision	**Chapter Eight** Supervision Is Curriculum Development	**Chapter Ten** Supervision Is Facilitating Human Development	**Chapter Fourteen** The Beginning Supervisor

Topics in Educational Supervision

Book	A History, Nature, and Purposes of Educational Supervision	B Organization for Supervisory Services	C Human Skills in Supervision	D Supervisory Techniques for Planning and Managing Educational Programs
Marks, J. R., E. Stoops, and J. King-Stoops, **Handbook of Educational Supervision: A Guide for the Practitioner**, 3rd ed., Allyn and Bacon, 1985	**Chapter One** Background for School Supervision	**Chapter Two** Supervisory Services from Federal, State, and Intermediate Unit Agencies **Chapter Three** How to Organize the Supervisory Program	**Chapter Four** How to Be a Successful Supervisor through Leadership and Human Dynamics	
Olivia, P. F., **Supervision for Today's Schools**, 2nd ed., Longman, 1984	**Chapter One** What Is Supervision? **Chapter Two** Issues in Supervision		**Chapter Ten** Helping Teachers to Work Together	
Sergiovanni, T. J., and R. J. Starratt, **Supervision: Human Perspectives**, 3rd ed., McGraw-Hill, 1983	**Chapter One** Perspectives for Supervision **Chapter Two** Normative and Descriptive Views of Supervision **Chapter Ten** An Instrumental Theory of Supervisory Leadership **Chapter Eleven** A Substantive Theory of Supervisory Leadership **Chapter Twelve** The Controversial Context of Supervision	**Chapter Three** The Organizational Environment for Supervision	**Chapter Four** Building a Climate for Supervision **Chapter Five** Leadership Behavior and Supervisory Effectiveness **Chapter Six** A Contingency Approach to Supervisory Leadership **Chapter Eight** Teacher Motivation and Supervisory Effectiveness **Chapter Nine** Supervision and Group Effectiveness	**Chapter Seven** Power, Authority, and Conflict in Supervision **Chapter Thirteen** The Supervisor's Educational Platform

Topics in Educational Supervision

E	F	G	H
The Supervisor as Facilitator in the Improvement of Teaching and Learning	**The Supervisor as Leader in Curriculum Development**	**The Supervisor as Leader in Staff Development**	**The Supervisor as a Researcher and Member of the Profession**
Chapter Six How to Improve Supervisory Visits **Chapter Seven** How to Improve Supervisory Follow-Up Conferences **Chapter Nine** How to Measure Teacher Effectiveness and Improve Methods and Techniques of Instruction **Chapter Ten** How to Help the Staff Understand and Guide Children **Chapter Twelve** How to Select, Organize, and Facilitate the Use of Instructional Media and Library Facilities	**Chapter Eleven** How to Help the Staff Study and Improve the Curriculum	**Chapter Five** How to Promote Staff Development and Handle Some Special Problems **Chapter Eight** How to Provide Successful Faculty Meetings	**Chapter Fifteen** How to Select Personnel for Supervisory Positions **Chapter Sixteen** How to Make Effective Decisions and Evaluate a Supervisory Program **Chapter Seventeen** Professional Responsibilities of the Supervisor
Chapter Three Helping Teachers to Plan for Instruction **Chapter Four** Helping Teachers to Present Instruction **Chapter Five** Helping Teachers to Evaluate Instruction **Chapter Six** Helping Teachers with Classroom Management **Chapter Twelve** Helping Teachers on a One-to-One Basis **Chapter Thirteen** Administrative Assessment of Teacher Performance	**Chapter Seven** Helping Teachers with Curriculum Development **Chapter Eight** Helping Teachers to Evaluate the Curriculum	**Chapter Nine** Helping Teachers through In-service Programs **Chapter Eleven** Helping Teachers to Evaluate Themselves	**Chapter Fourteen** Improving Instructional Supervision
Chapter Sixteen Supervision for Classroom Effectiveness **Chapter Seventeen** Clinical Supervision and Teacher Evaluation **Chapter Nineteen** Theory of Practice in the Supervision and Evaluation of Teaching	**Chapter Fourteen** Curriculum Concerns for Supervisory Leadership **Chapter Fifteen** Supervision and Program Evaluation	**Chapter Eighteen** Supervision as Staff Development	**Chapter Twenty** Human Resources Supervision: What Lies Ahead?

Topics in Educational Supervision

Book	A History, Nature, and Purposes of Educational Supervision	B Organization for Supervisory Services	C Human Skills in Supervision	D Supervisory Techniques for Planning and Managing Educational Programs
Tanner, D., and L. Tanner, **Supervision in Education: Problems and Practices**, Macmillan, 1987	**Chapter One** The Evolution of Supervision **Chapter Four** Supervisory Roles **Chapter Six** Models of Supervision	**Chapter Three** The Administrative Organization of Supervision	**Chapter Five** The Ecology of the School and the Climate for Supervision	**Chapter Nine** Forces for Educational Improvement: Change and Conflict **Chapter Ten** Sources of Educational Improvement
Wiles, J., and J. Bondi, **Supervision: A Guide to Practice**, 2nd ed., Charles E. Merrill, 1986	**Chapter One** Orientation to Supervision **Chapter Three** Supervision in Practice	**Chapter Two** Leadership in Supervision	**Chapter Four** Aiding Human Development **Chapter Seven** Encouraging Human Relations	**Chapter Nine** Fulfilling Administrative Functions **Chapter Eleven** Politics in Supervision

Topics in Educational Supervision

E	F	G	H
The Supervisor as Facilitator in the Improvement of Teaching and Learning	**The Supervisor as Leader in Curriculum Development**	**The Supervisor as Leader in Staff Development**	**The Supervisor as a Researcher and Member of the Profession**
Chapter Seven Supervision and Teacher Effectiveness **Chapter Eight** Common Classroom Problems	**Chapter Eleven** What the Supervisor Needs to Know About the Curriculum: Rationales and Functions **Chapter Twelve** What the Supervisor Needs to Know About the Curriculum: Design and Development	**Chapter Thirteen** Establishing and Administering the Inservice Education Program	**Chapter Two** The Professionalization of Supervision **Chapter Fourteen** How to Judge a School: Developmental Criteria
Chapter Six Improving Classroom Instruction **Chapter Ten** Evaluating for Effectiveness	**Chapter Five** Designing and Developing Curriculum	**Chapter Eight** Providing Staff Development	**Chapter Twelve** Case Studies in Supervision **Appendix A** Resources for Supervisors **Appendix B** Readings for Professional Development

Topic A

History, Nature, and Purposes of Educational Supervision

SCHOOL SUPERVISION OF SOME TYPE HAS BEEN PRACTICED SINCE the earliest days in colonial America. At that time, supervision took the form of administrative inspection by ministers, trustees, and other lay groups. Later, the responsibilities for supervision became the job of the superintendent at the district level and the principal or teaching principal at the building level. The earliest professionals who devoted full time to instructional supervision appeared in the late 1800s in city schools. Instructional supervisors for rural schools followed in the early 1900s.

In those early days, the administrative inspectors visited schools, observed teachers, and quizzed students to ensure that order was kept and teachers performed their duties. As the attitude of responsibility for the improvement of teaching—rather than simply monitoring the process—began to develop, inservice education was conducted by the superintendent or supervisor. The activities of inservice education were intended to train teachers to use "the best" methods of teaching reading, arithmetic, and other subjects.

Supervision as a helping or service function gradually evolved. Gradually, too, has grown the recognition that supervision embraces many tasks and these tasks are deployed quite differently from one school system to the next. Among most writers in supervision, it is accepted that whoever performs a task of supervision is, for that time at least, a "supervisor." Over time, a shift occurred in thinking of supervision as the activity of one person to supervision as a school function involving many people. Associated with that change, autocratic supervision gave way to scientific supervision which, in turn, gave way to democratic, cooperative, and human relations models. More recently, scholars in supervision have advanced other models to guide the delivery of supervisory services. These include a human resources model, developmental supervision, and differentiated supervision.

Supervision in education has as its central mission the facilitation of effective instruction. Supervisors work with teachers and other staff members to help improve instruction, develop curriculum, and promote the professional growth of all staff members. Supervisors provide leadership for change in schools—in teaching practices, in curriculum, and in other areas that affect the quality of the instructional program.

The articles in this first section were selected to provide a knowledge and a philosophical foundation for considering the seven topics that follow. The articles have been chosen to stimulate thought about the nature and purposes of supervision. They prompt questions about how well the purposes are being achieved and the degree to which supervision is recognized as a leadership function.

In "Supervision in Historic Perspective," Karier defines supervision as "the direction and critical evaluation of instruction" and claims that the form supervision has taken over the years has been directly related to a number of historically determined factors. He traces three of these factors—the goal of education, the locus of educational authority, and the socially acceptable means for implementing the educational goal—from the seventeenth to the twentieth century in an effort to show that the supervisory process has changed considerably. Students of supervision who are interested in the genesis of supervision and the ways in which historical forces have shaped and changed the nature of supervision will find this chapter from the 1982 ASCD Yearbook, *Supervision of Teaching*, illuminating.

In another chapter from the same publication, McNeil offers a second opportunity for the reader to delve into the history of supervision. He focuses on the scientific approach to supervision and traces that approach from its beginning early in the twentieth century to the present day. His chapter sheds light on early conceptions of scientific supervision by writers such as Franklin Bobbitt and discusses scientific research by supervisors, the impact of process-product research on supervision, and the future of scientific supervision.

Krajewski, in "Understanding the Whys of Instructional Supervision," urges that we examine the assumptions, principles, hypotheses, and conceptual frameworks on which we base our theories and build our supervision ideas. He suggests that, in our zeal to excel in instructional improvement, we have been too quick to respond to the how's and have ignored the why's. Practitioners will want to test their beliefs about supervision against the six key elements which he claims provide a "firm foundation for building a viable instructional improvement program."

Three kinds of skills—human, managerial, and technical—are included in "The Supervisory Skill Mix" de-

scribed by Alfonso, Firth, and Neville. It is their claim that technical skills, more than any other, make the role of the instructional supervisor unique and that it is in the use of those skills that supervisors are least effective. Students of supervision may want to talk with practitioners to decide if they share the concerns of the authors.

In "Synthesis of Research on the Principal as Instructional Leader," De Bevoise concludes that instructional leadership can be viewed as a responsibility that is shared by a community of people inside and outside the school. The article should stimulate discussion and provide implications for further research.

Sergiovanni, in "Leadership and Excellence in Schooling," discusses five leadership forces—technical, human, educational, symbolic, and cultural—and relates them to excellence in schooling. He says the first three forces provide "the critical mass needed for *competent* schooling." Excellent schools, Sergiovanni claims, are characterized by symbolic and cultural forces. Practitioners who strive for excellence may wish to examine their leadership behavior for the presence of symbolic and cultural forces.

The area of interest suggested by the title given to Topic A—History, Nature, and Purposes of Educational Supervision—is, indeed, a broad one. That breadth resulted in a sampling of articles whose individual emphases are so widely scattered that the articles defied comparison. However, the articles are individually important and contribute to an understanding of this topic.

The following questions and suggested activities may prompt a closer look at the articles and stimulate discussion.

1. Use the information in Karier's chapter from *Supervision of Teaching* to develop a chart that traces historically the forms supervision has taken in relationship to: (1) goals of education, (2) the locus of educational authority, and (3) the socially acceptable means for implementing the educational goals.

2. Draw from McNeil's chapter and other sources to trace scientific supervision from its time of "optimistic promise" in the early 1900s to the present day.

3. What are the six key elements "for building a viable instructional improvement program" that Krajewski has identified, and to what extent do they characterize the instructional supervision you have experienced?

4. Within each supervisory skill area discussed by Alfonso, Firth, and Neville, list at least five specific skills you believe to be necessary for effective supervision. Justify your choices.

5. If, as De Bevoise reports, the research shows the instructional leadership role to be a shared one, what are the implications of that finding for the principal who wants to be effective in instructional improvement?

6. Select a school that you consider "excellent" and study the leadership behavior of the principal or designated instructional supervisor. Write a description of the leadership behaviors of the person you selected and match those behaviors with the five forces identified by Sergiovanni. Give specific examples of "symbolic" and "cultural" forces you observed.

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Chapter 1.
Supervision in Historic Perspective

Clarence Karier

IF WE DEFINE EDUCATION AS LAWRENCE A. CREMIN DOES "as the deliberate, systematic, and sustained effort to transmit, evoke, or acquire knowledge, attitudes, values, skills, or sensibilities, as well as any outcomes of that effort," [1] and we define supervision as "the direction and critical evaluation of instruction," [2] then the form supervision takes is directly related to a number of historically determined factors. The first factor is the goal of education, the second is the locus of educational authority, and the third is the socially acceptable means for implementing the educational goal. Viewed historically, all three dimensions of the supervisory process have changed considerably.

While many goals of education have remained fairly constant, others have undergone considerable change. Although it is difficult to specifically articulate the goals of American education at any given time, they do exist, if only implicitly in our action. However defined, the goals of American education are a composite picture of the hopes, expectations, and possibilities any generation has with respect to the future generation. In this sense, education is a cultural renewal process in which the economic, social, religious, and cultural values of one age are systematically reconstituted for the next. As values shift so eventually does educational practice. The goals of education of seventeenth century Puritan New England were thus quite different from those of the nineteenth century settler on the western frontier and vastly different from those of the corporate-minded twentieth century American.

Not only have the goals of American education changed over time but the locus of educational authority has also changed. Who is responsible for the education of the young? For the Puritan, that responsibility rested with the parent in cooperation with the church which helped define the larger community. In the context of the family unit most of the economic, social, religious, and cultural values were transmitted. To be sure, there were institutional forms of education such as the col-

[1] Lawrence A. Cremin, *Traditions of American Education* (New York: Basic Books, 1977), p. viii.
[2] *Webster's New Collegiate Dictionary*, p. 852.

Clarence Karier is Professor of the History of Education and Chairperson of Educational Policy Studies at the University of Illinois, Urbana-Champaign.

lege, Latin grammar school, district school, and dame school, each in its own way institutional legacies of Medieval, Renaissance, and Reformation cultures, but the center of authority did not rest in state or public hands. The educational authority in colonial America rested mainly with the parents who expressed that authority in a variety of private forms of education.

Private education remained the dominant form throughout the colonial era, even while governmental authority increased. By the constitutional period, a wide variety of private educational institutions served a very literate population.[3] As the nineteenth century dawned in the grips of a strong nationalistic fervor, public power at both the federal and state levels grew. By the third and fourth decades of that century, state authority had grown especially in the northeast and middle Atlantic states to such an extent that a public school could be clearly defined as a school that was publicly controlled and publicly financed. By the common school era (1830-1850) this distinction as to what constituted a public school as opposed to a private school was largely accepted. Prior to that time the difference was often blurred.[4]

Although the major authority over the education of the child still rested with the parent in the family unit, the common school movement led by Horace Mann in Massachusetts, Henry Barnard in Connecticut, Calvin Stowe in Ohio, Caleb Mills in Indiana, and John P. Pierce in Michigan extended state authority at the expense of what had been parent-family authority. The common school movement itself was spurred on by the passions of nationalism and the social and economic instability resulting from immigration and industrialization. By the Civil War period America had greatly extended state authority in education.

What began as a trickle of state authority in education became by the end of that century a raging torrent. Underlying the declining educational role of the family was its changing function from being both a producing and consuming unit to being solely a consuming unit. When the first artisan cobbler laid down his pegs and awl and left his household for the power-driven machines of the factory, the decline of the family as a vocational educator began. At virtually every turn in the nineteenth and twentieth centuries the educational authority of the parent gave way to the growing authority of the state.

Not only have the goals of education and the locus of authority changed, but also the acceptable means for implementing those goals. The idea that schooling is necessarily the main course of one's education is of relatively recent origin. In the age of Benjamin Franklin and Thomas Jefferson formal schooling was not critical in the education of the young. Thus, when Jefferson argued that the average citizen must

[3] For example, see Cremin's discussion of this in *Traditions of American Education*, pp. 39-89.

[4] See Clarence J. Karier, *Man, Society, and Education* (Glenview, Ill.: Scott, Foresman, 1967), p. 59.

be educated so as to "recognize tyranny and be able to revolt against it," and then suggested in his *Bill for the Diffusion of Knowledge*[5] that the average citizen would need only three years of publicly supported schooling, he was thinking in terms of the self-taught individualism of his age. Jefferson believed that in three years of schooling one could learn enough of the essential tools to become an educated citizen. Thus one might learn art, architecture, law, medicine, navigation, surveying, engineering, and languages in a variety of ways. For example, one could become accomplished in any of these areas by self-study, by apprenticing oneself to a person practicing the art, or by responding to any of the newspaper advertisements promising to teach an art for a fee.

In that pre-modern world, Jefferson, Franklin, and others could become knowledgeable in a variety of fields. But by the early decades of the nineteenth century that world began to change. As new knowledge increased, requests for extended formal training and state licensing and credentialing in some fields appeared.[6] The beginning signs of the modern practice of making education synonymous with schooling were evident in the nineteenth century.

As the idea of education as synonymous with schooling grew, the locus of authority shifted from parent to state. In this context, a cadre of state representatives emerged who, working within the growing corporate structure, claimed expertise in the techniques of implementing institutionally-derived goals. As the system became more bureaucratic, the primary values became standardization and efficiency. As means became evaluated more on efficiency grounds, the role of the professional teacher and supervisor entered the highly-charged, problematic modern world of social engineering.

Given, then, the changing nature of the supervisory process with respect to goals, means, and authority over time, it might be helpful to keep these dimensions of the process in mind as we scan two significant periods of educational reform and briefly analyze one of the problems of the professional supervisor in the mid-twentieth century. Our first period under consideration will be that of the common school era (1830-1850) when the state system of publicly controlled elementary schools took shape. The second period will be that of the progressive liberal reform era (1890-1920). This was the period when our secondary schools not only underwent fantastic expansion, but it was also the period when they were effectively reorganized within the framework of a centralized bureaucratic system that has remained the dominant model of school governance throughout the twentieth century.

[5] See Gordon Lee, *Crusade Against Ignorance* (New York: Classics Series, 1967), p. 83.

[6] I do not mean to imply that all skill training was wide open or that it had been previously. The Medieval guild system was not an open system. However, in the transition from the feudal system to the capitalist system, there was a weakening of the guild system even as the apprenticeship system was derived from that system, making room for a more competitive, possessive individualism as reflected in the bourgeoisie class. Once this class was in place, new institutional structures were created that were equally as controlling.

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The Common School Era

The common school, as many have noted, was not a school for commoners but was a school that taught the common elements of American culture. The integrative purpose of such a school loomed large in the minds of Horace Mann and others who led the common school movement. To Mann and others the new American society seemed to be disintegrating before their eyes as they observed the social, religious, and economic conflicts of the day. As the family began to lose its producer function to a factory system of employment and poverty-stricken Irish Catholics flooded Protestant Boston providing cheap labor and undercutting the native workers, the potential for social disintegration seemed alarmingly clear. As Horace Mann put it:

> The mobs, the riots, the burnings, the lynchings, perpetrated by the men of the present day, are perpetrated because of their vicious and defective education. We see and feel the ravages of their tiger passions now, when they are full grown; but it was years ago when they were whelped and suckled. And so too, if we are derelict in our duty in this manner, our children in their turn will suffer. If we permit the vulture's eggs to be hatched, it will then be too late to take care of the lambs.[7]

As a whig politician opposed to Jacksonian democracy and as a strong advocate of industrial expansion, Mann saw the possibilities of social class conflict. He argued that, "Property and labor, in different classes, are essentially antagonistic; but property and labor, in the same class, are essentially fraternal." [8] Mann's solution to the social class conflict that surfaced on the first wave of industrialization in America lay in the development of the common school and a more highly educated populace. It "never can happen," Mann argued, "that an intelligent and practical body of men should be permanently poor." [9] The more formal education a population had the less chance it had of being poor.

The argument Mann set forth in his Twelfth Annual Report to the Massachusetts Board of Education assumed not only that education would prevent poverty and thus reduce class conflict through the process of dividing the wealth, but that the pool of wealth to be distributed would steadily increase as a consequence of a more highly educated populace. Horace Mann believed education to be the "balance-wheel of the social machinery," [10] which disarmed the poor of their hostility toward the rich by preventing "being poor." As Mann put it:

> Beyond the power of diffusing old wealth, it has the prerogative of creating new. It is a thousand times more lucrative than fraud; and adds a thousand fold more to a nation's resources than the most successful conquests. Knaves and robbers can obtain only

[7] As quoted by Karier, *Man, Society, and Education*, p. 60.
[8] As quoted by Lawrence A. Cremin, *The Republic and the School: Horace Mann on the Education of Free Men* (New York: Teachers College Press, 1957), p. 87.
[9] *Ibid.*
[10] *Ibid.*

what was before possessed by others. But education creates or develops new treasures, treasures not before possessed or dreamed of by anyone.[11]

Mann had clearly conceptualized a theory of human capital. He wrote to Abbott Lawrence that "Education has a market value. . . . It may be minted and will yield a larger amount of statutable coin than common bullion." [12]

The same year Karl Marx wrote *The Communist Manifesto* (1848), Horace Mann penned his last Annual Report to the Massachusetts Board of Education. In that report was embedded a theory of human capital that conceptually linked schooling to economic and social growth within a meritocratically-organized social and economic class system. Here, then, was the rationale for public schooling that would sustain the American nation for the next century. Implicit in that rationale was an ideology of competitive and possessive individualism packaged in the context of equal opportunity for all within a system of schools locally managed under state authorization.

The whig political-educational platform of Mann combined the earlier Hamiltonian respect for property with the Jeffersonian concern for equality, all nicely set within the institutional framework of a meritocratically governed public school system. The end product was a school system that taught not only how to read, write, and cipher but also Horatio Alger stories from which children learned that material rewards and riches came to those who played the competitive games of business life. As the nineteenth century wore on, the religious and moral values expressed in the educational literature of an earlier period were frequently overshadowed by business values.

The common elements of American culture were woven into the fabric of children's books and teaching manuals throughout the nineteenth century. As Barbara Berman, Monica Kiefer, and others have shown, these strands consist of considerable Protestant moral precepts intertwined with business values interspersed with military modeling. The Mexican War, the Civil War, the Indian Wars, and the Spanish-American War left their imprint on the rhetoric and practice of the common school.

It was not only the line and staff method of organization that school people borrowed from the military, the military model clearly entered the literature on classroom teaching and supervision of instruction as well. As the *Michigan Teacher* in 1873 attests, "A good school, like a great army, must be drilled to precise, prompt, and well-ordered movement." [13] In 1887, Gabriel Compayrés in *Lectures on Pedagogy, Theoretical*

[11] *Ibid.*, p. 88.

[12] As quoted by Richard H. deLone, *Small Futures: Children, Inequality, and the Limits of Liberal Reform* (New York: Harcourt Brace Jovanovich, 1979), p. 43.

[13] As quoted by Barbara Roesch Berman, "A Method of Progress: Social Mission in Nineteenth-Century Teacher Training Literature, 1830-1890" (Ph.D. dissertation, University of Rochester, 1978), p. 257.

and Practical wrote, "A child of our common schools is not only a future workman, but a future soldier." [14]

The Progressive Era

By 1900 only ten percent of American youth 14 to 17 attended a secondary school. Fifty years later approximately ninety percent of that age group was in secondary schools. This massive system of schooling was economically based, to a large extent, on the rising development of corporations which profoundly shaped American life.

The phenomenal growth of the corporation was critical in establishing the mass system of American production, distribution, and consumption in the twentieth century. Charles Forcey points out that:

> . . . in 1897 the total capitalization of all corporations individually valued at a million dollars or more came to only 170 million. Three years later the same figure for total capitalization stood at five billion, and in 1904 at over twenty billion.[15]

Massive accumulation of capital was now underwriting the creation of mass production systems.

As Lawrence Cremin in 1961 correctly concluded, industrialization, urbanization, and immigration were the central problems of the era.[16] The political progressives' solution to these problems was found in the idea of the regulatory state. This concept of state, as it was fashioned by such Wisconsin progressives as Robert T. Ely, John R. Commons, and Robert M. LaFollette and later instituted by the national government, was itself historically rooted in the paternalistic Bismarckian state that utilized government to rationalize and regulate the political-social economy.

The Wisconsin idea as expressed in progressive legislation at both the state and national level was modeled after its German counterpart. The corporate liberal state that emerged in America was, like the Bismarckian state, designed to ameliorate fundamental conflict between competing economic and social interests. As the state became a regulatory agency, it also became a protective welfare agency which, in exercising its power, extended its compulsory authority to nearly all aspects of life. The larger corporations as well as unions found it to their financial advantage to support greater governmental regulatory authority in many areas of life.[17] That same state authority that regulated commerce also came to regulate drugs, alcohol, tobacco, food, clothing, work, leisure time, communications, news, knowledge, research, medicine, child labor, social welfare, and education.

[14] *Ibid*., p. 258.

[15] Charles Forcey, *The Crossroads of Liberalism* (New York: Oxford University Press, 1961), p. xiv.

[16] Lawrence A. Cremin, *The Transformation of the School* (New York: Knopf, 1961).

[17] See Gabriel Kolko, *The Triumph of Conservatism: A Reinterpretation of American History* (New York: Free Press and Glencoe, 1963); and James Weinstein, *The Corporate Ideal in the Liberal State* (Boston: Baron Press, 1968).

Within this rising tide of state power, child labor laws as well as compulsory education laws began to be seriously enforced. The new immigrants from southeastern Europe who flooded into our urban centers now had to be Americanized quickly and trained for the workplace. With the Haymarket Riot, the Ludlow Massacre, and the Pullman Strike in the background, more and more voices could be heard calling for order, control, and social efficiency. Political and social reform was intimately tied to educational reform. Within that milieu of ethnic and racial conflict and economic and social dislocation, there emerged a workable coalition of business and professional elites, new school managers and university people who organized to reform the schools. As David Tyack put it, these elites:

> . . . planned a basic shift in the control of urban education which would vest political power in a small committee composed of "successful men." They wished to emulate the process of decision making used by men on the board of directors of a modern corporation. They planned to delegate almost total administrative power to an expert superintendent and his staff so that they could reshape the schools to fit the new economic and social conditions of an urban-industrial society. They rejected as anachronistic, inefficient, and potentially corrupt the older methods of decision making and school politics. Effective political reform, said one of their leaders, might require "the imposition of limitations upon the common suffrage." They ridiculed "the exceedingly democratic idea that all are equal" and urged that schooling be adapted to social stratification.[18]

Raymond E. Callahan in his work *Education and the Cult of Efficiency* very well documented the efficiency craze of the new administrative bureaucracy. He however mistakenly laid the cause of the problem on the vulnerability of schoolpeople to business pressures. Paul Violas in *The Training of the Urban Working Class* and Joseph Cronin in *Control of Urban Schools,* as well as David Tyack in *The One Best System,* have clearly shown that school leaders were not so much victims of business influence and pressure as they were exponents of it. These works further document that even though there was some opposition, on the whole, school leaders were clearly successful in achieving their goal.[19] One such leader, Ellwood P. Cubberley, for more than three decades not only dominated the field of history of education, but profoundly shaped the thinking of the administrative cadre of public schools in the twentieth century. Cubberley argued that the ward system of organizing urban schools was not only inefficient and unwieldy, but it allowed the less intelligent and less successful people to rule the board. As Cubberley put it:

> The writer once knew a ward board composed of one physician, two businessmen, one good lawyer, two politician lawyers with few clients, one bookkeeper, one blacksmith, one saloon-keeper, one buyer of hides and tallow, one butcher, one druggist, one worker in a lumber yard, one retired army officer, one man of no occupation except general opposition to any form of organized government, and one woman. The result

[18] David Tyack, *The One Best System* (Cambridge: Harvard University Press, 1974), p. 126.
[19] For an analysis see *Ibid.*, p. 137.

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was a board divided into factions, members from the better wards having but little influence with those from the poorer wards. The constant danger was that the less intelligent and less progressive element would wear out the better element and come to rule the board.[20]

The schools, Cubberley argued, must be governed by the "better" people of the community and this could be accomplished by changing from a ward system of school board representation to a five to seven member board elected at large. As he put it:

One of the more important results of the change from ward representation to election from the city at large, in any city of average decency and intelligence, is that the inevitable representation from those "poor wards" is eliminated, and the board as a whole comes to partake in the best characteristics of the city as a whole.[21]

School board reorganization during the progressive era proceeded with the clear intent of getting our "best elements" to control the school system. Board members elected at large would no longer represent their own respective wards where they were accountable at the neighborhood level but would be supposedly more representative of ". . . the best characteristics of the city as a whole."

Reformers also insisted that politics be removed from the schools. This was to be done first by electing school board members at large so that the "better elements" of the community would control the board and, second, by holding school board elections separate from political elections, thus freeing them from the taint of party affiliation. The progressive liberal drive for a "nonpartisan" school board elected at large, effectively disenfranchised the poorer classes. School boards in the progressive era moved more under the control of business and professional leaders, and the disproportionate representation of these classes on school boards remains to the present day.[22]

Amidst these changes emerged a professionalization of the superintendency which came in the wake of the growth of cities. As late as 1870, Cubberley reports 29 city superintendents of schools, but by 1876 there were 142 cities of 8,000 inhabitants or more which had a city superintendent.[23] The population growth in the metropolitan centers stimulated both the bureaucratization of management as well as the professionalization of school administrators. By the beginning of the century courses in school administration could be taken at the university level.

Throughout the early decades of the twentieth century, school management was increasingly recognized as a job for professional experts trained at the university level. For the most part, these experts

[20] Ellwood P. Cubberley, *Public School Administration* (New York: Houghton Mifflin, 1922), p. 93.

[21] *Ibid*., p. 95.

[22] See George Sylvester Counts, *The Selective Character of American Secondary Education* (Chicago, 1922).

[23] Cubberley, *Public School Administration*, pp. 58-59.

were drawn from the middle class. By the 1920's most city school systems were governed by boards drawn primarily from business and professional classes and managed by middle-class professional administrators who in turn tended to hire lower middle-class teachers who had just moved from a social position of lower class. It is little wonder, then, that most American public schools by mid-twentieth century were so thoroughly middle class.

While the nineteenth century witnessed the rise of the common school, the first half of the twentieth century witnessed the rise of the secondary school. For example, during the 70 year period from 1870 to 1940 the population of the United States increased three times over, while the population of our secondary schools increased 90 times over. This astonishing growth in schooling set the conditions for reorganizing schools from a committee system to the more efficient military line and staff system. The new organization allowed for greater centralized control and yet considerable specialization of function.

As the overall school systems became larger, the role of the superintendent became more specialized. As this occurred, the work of supervision of instruction was delegated to a new cadre of administrators. By February 1921, the National Conference on Educational Method was organized as an independent society, and by 1929 the organization changed its name to the Department of Supervisors and Directors of Instruction and became a separate department of the National Education Association. This department maintained its separate identity until 1943 when it merged with the Society for Curriculum Study to become the Department of Supervision and Curriculum Development of the NEA.

Thus by 1929 the trend toward professionalizing supervision as a separate field had advanced far enough to warrant a separate department in the NEA. Although it is impossible to describe all the concerns of supervisors and directors during the next two decades within this short space, it is clear that the problems they struggled with were problems of ends as well as means, very much influenced by the historic circumstances of their time.

The Depression

The new Department of Supervision and Curriculum Development of the NEA was hardly organized when the country was overwhelmed by a severe depression. Many supervisors and administrators believed their role during that time was to lead the new generation to social adjustment and to what little happiness might be wrested from the "dull and sordid years" that they believed lay ahead for that generation. While Franklin Delano Roosevelt spoke of this generation having a rendezvous with destiny, public school administrators more often

spoke in sadder, less uplifting terms. E. W. Butterfield, State Commissioner of Education for Connecticut, expressed this view when he said,

> Our schools face this new task. While children are still pupils, the schools are to educate all, to lead to social adjustments, to train for a mechanical age, and to give, thru club activities, thru music and art and moving picture appreciation and homemaking and beauty culture, the interests that will carry happiness thru many dull and sordid years.[24]

Throughout the next few decades the overall view of education was to help the younger generation adjust to the real world of pain and suffering which lay ahead. As Butterfield continued,

> Blessed is the boy or girl who, for fifty years, will meet in turn pain, worry, poverty, loss of friends, hard work, generous in amount and monotonous in nature, and all of the woes and ills that flesh is heir to, and yet will search for no escape thru the door of despair, suicide, or insanity.[25]

While a few educators paused momentarily to listen to George S. Counts' clarion call — "Dare the Schools Build a New Social Order?" — most continued on in the more secure role of adjusting the younger generation to the social and economic necessities of what they perceived to be the real world. Meeting the needs of children in such a world called for "individualizing instruction," which often meant tracking the young back into the social and economic class from whence they came.

The world of technological change continued to impress supervisors. Some spoke of cultural lag, while others spoke of scientific management, social efficiency, and scientific measurement. Still others spoke of cooperative curriculum revision, the whole child, pupil-teacher planning, democratic supervision, and life adjustment curricular goals. While efficiency and scientific management continued to occupy the attention of many, toward the closing years of the 1930s such words as democracy, cooperative living, and group thinking became increasingly commonplace. While a few educational leaders sought to change the social order through the schools, many more thought in terms of social harmony and life adjustment. All seemed to agree that educational supervisors ought to avail themselves of the new techniques emerging from the new sciences of psychology and sociology for analyzing, shaping, and controlling human behavior so as to become more efficient social engineers or, at least, more effective educational leaders.

The interrelationship of ends and means, as John Dewey never tired of repeating, was inevitably transactionally related. Social science methodology was never socially neutral, although many educators liked to treat it as if it were. Dewey correctly warned that undemocratic methods, no matter how objective, were still likely to produce undemocratic ends.

[24] *National Education Association Proceedings*, Vol. 72, 1934, p. 684.
[25] *Ibid.*

By the end of the 1930s a crucial philosophical discussion was taking place among professional educators which proved highly significant in terms of the role the profession would take in the decades ahead. That discussion centered on the changed meaning of the word democracy and what was meant by democratic method. While in retrospect some have dismissed these discussions as rhetorical flourishes, they were, indeed, substantive critical arguments.

In the minds of Dewey and others the argument over democracy centered on the question of method. The question of whether social science methods would or could contribute to a more democratic society troubled the young professor of education, Kenneth D. Benne at the University of Illinois. In a 1949 edition of *Progressive Education* devoted to social engineering,[26] Benne argued that educational leaders must become "change-agents skilled in inducing, directing, and stabilizing those changes in persons, groups, and organizations which intelligent development of educational situations today requires."[27] Such social engineering, Benne argued, "will serve democratic aims and observe democratic scruples and standards only if it is guided by a methodology which incorporates basic democratic values as procedural norms."[28]

Benne, along with R. Bruce Raup, George E. Axtelle, and B. Othanel Smith, further developed these ideas in the 1943 Yearbook of the National Society of College Teachers of Education under the title, *The Discipline of Practical Judgment in a Democratic Society*, later published as *The Improvement of Practical Intelligence* in 1950. Although Dewey did not entirely agree with the work of these authors, their study is a landmark attempt to explicitly deal with the practical linkage between the use of social science methodology and the possible consequences for a democratic social order. That the book failed to reach a large audience makes it no less significant. It may have fallen on deaf ears because it was originally published during war time when other concerns were obviously more significant. Perhaps it was the fact that it did not represent the wave of the future. For most educational administrators and supervisors in the post-World War II period the wave of the future lay in indiscriminate borrowing and use of new social science techniques, devoid of philosophic and social concerns. The demise of philosophy of education as a significant component in the education and training of administrators and supervisors parallels the rise in the use of social science disciplines. Since World War II, educational leaders have tended to worry most about the efficiency of means and to treat the ends as something given.

[26] For example see David H. Jenkins, "Social Engineering in Educational Change: An Outline of Method," *Progressive Education* 26, 7 (May 1949): 193-197; Max R. Goodson, "Social Engineering in a School System," *Progressive Education* 26, 7 (May 1949): 197-301; Kenneth D. Benne, "Democratic Ethics in Social Engineering," *Progressive Education* 26, 7 (May 1949): 201-207.

[27] *Ibid.*, Benne, p. 201.

[28] *Ibid.*, p. 202.

World War II demonstrated the useful application of social science methods to practical problems of change. Systems analysis of budgets as well as personnel found its way into the lexicon of educational leadership. "Group Dynamics" was another technique with direct application to educational engineering.

Funded by the Office of Naval Research, the first National Training Laboratory on Group Development took shape under the joint directorship of Leland P. Bradford of the NEA and Dorwin Cartwright of MIT with a selected cadre of trainees, among whom were Kenneth Benne of Teachers College, Columbia, and Ronald Lippitt of MIT's Research Center for Group Dynamics. The stated intent of this laboratory was to help leaders and groups "achieve maximum human productivity" while bringing their "behavior into line with the difficult demands of democratic ideology."[29] The laboratory was further initiated:

> (1) to provide research scientists with an opportunity to communicate scientific knowledge of group dynamics to key education and action leaders, (2) provide an opportunity for observing, experiencing, and practicing basic elements of the democratic group process which are relevant to educational and action leadership, and (3) to provide an experimental laboratory for further research explorations of basic problems of assessment and improvement of efficiency of group growth, group thinking, and group action.[30]

Thus the National Training Laboratories gave birth to sensitivity training. Over the next three decades it was used by government, business, education, and religious institutions under the rubric of "democratic group process" to achieve efficiency in "group growth, group thinking and group action." While one might seriously take issue as to whether or not this process was democratic, it is clear that it was a highly manipulative series of techniques whereby individual thought, identity, and freedom were overcome in order to serve the bureaucratic "group" in thought and action. In the end it proved to be a highly effective apparatus to be used in any corporate structure from the military, which originally funded it, to the religious, economic, and educational institutions which used it. From its origins it promised efficiency in maximizing "human productivity" within an institutionalized framework.

The problem that emerged in the NTL experiment was one that emerged over and over again in the field of education in the post-World War II period. While administrators and supervisors repeatedly turned to the social sciences for more effective methodology and efficient techniques for predicting and controlling human behavior, their role in goal determination was diminishing. As this occurred the function of the humanities in the education of such leaders became more and more irrelevant, if not a bit anachronistic. The older self conception of the

[29] *Preliminary Report of the First National Training Laboratory on Group Development* (Mimeographed) Bethel, Maine, June 16 to July 4, 1947, p. iii.
[30] *Ibid*

supervisor as participating in goal determination, which often appeared in the earlier pre-war literature, seemed to fade as the more technocratic model predominated. Under the circumstances the question of moral and ethical ends of education found little place in the professional literature.

For the most part educators did not take the lead in social reform movements. Although some educators in the late 1930s and early 1940s participated in intercultural programs which struggled against racism and sexism so inherent in this culture, by and large, the limited progress made in the post-war years in these areas was a consequence of the educational bureaucracy being forced to react from outside the system.

Over the last century as the idea of education became equated with schooling, and the locus of educational authority shifted from parent to teacher and then to bureaucratic authority, the locus of educational decision-making became increasingly obfuscated. Within this kind of framework, lacking any significant philosophical rationale for judgment, the means of education tend to be seriously evaluated solely in terms of efficiency criteria. Under such circumstances the end of efficiency justified the means of electrical shocks, group psychological manipulation, time-out boxes, sensitivity training, and drugs. Thus these devices became part of the repertoire of educational training techniques in the 1980s.

Perhaps Max Weber was correct when he argued that, "the fully developed bureaucratic mechanism" has characteristics similar to that of a machine when he said,

> Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs — these are raised to the optimum point in the strictly bureaucratic administration. . . .[31]

It was clear to him that,

> The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed bureaucratic mechanism compares with other organizations exactly as does the machine with the nonmechanical modes of production.[32]

Early on Weber pointed out that such an organization in its fullest development carried with it a thoroughly rationalized fundamental disrespect for life.

> When fully developed, bureaucracy also stands, . . . under the principle of *sine ira ac studio* (without scorn and bias). Its specific nature, which is welcomed by capitalism, develops the more perfectly the more the bureaucracy is "dehumanized," the more completely it succeeds in eliminating from official business love, hatred, and all purely personal, irrational, and emotional elements which escape calculation. This is the specific nature of bureaucracy and it is appraised as its special virtue.[33]

[31] H. H. Gerth and C. Wright Mills, *From Max Weber: Essays in Sociology* (New York: Oxford University Press, 1958), p. 214.
[32] *Ibid.*
[33] *Ibid.*, pp. 215-216.

The driving force of the Kafka-like bureaucratic world of profit and efficiency in which we live when carried to its rationalized extreme becomes irrationally devoid of human purpose and dignity. Unexamined, unchecked, and uncontrolled, the criteria of efficiency cut deeply into our traditional views of the dignity of life, knowledge, the meaning of words, and the overall political process by which we govern ourselves. In such a world, words like democracy and freedom lose their traditional meanings as they take on a propaganda function. Margaret Mead reflected this when she spoke to an earlier generation of progressive educators who in 1935 were involved in the task of creating a new social studies curriculum for what is now our present adult generation:

> . . . that for a society to operate efficiently, there must be a great number of words and phrases which will set up immediate responses in the minds of any group which is appealed to act or to refrain from action. Without such rallying words as "De . ocracy," "The Constitution," "Americanism," it would be impossible to organize masses into sufficiently integrated groups to produce social action. One definite task of the social studies teaching is to build up the *tone* of certain words, to place them in a series of contexts so that they have come to have a fixed stimulus value in the mind of the listener. The tale of the martyr, the patriot, the hero, the narration of events as traitorous or despicable — all of these have this function.[14]

The extent to which social studies teachers accepted Mead's analysis of the political process and the extent to which they were successful in effectively reaching the younger generation with such ideas is the extent to which they, in part at least, significantly helped shape the political life of the America of 1984.

[14] Margaret Mead, "Report of the Committee on the Social Studies of the Commission on the Secondary School Curriculum," October 26, 1935, Section 3, Rockefeller Archive Center. As quoted in Russell Marks' unpublished manuscript, "The Idea of I.Q.," Indiana University, Bloomington, Indiana, p. 162.

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Chapter 2.
A Scientific Approach to Supervision

John D. McNeil

WE ARE APPROACHING ANOTHER FIN DE SIECLE. Scientific supervision began with the optimistic promise to deliver both a more just authority for teacher improvement and great gains in student achievement. Forty years later, in the early 1960s, scientific supervisors were denigrated for not having determined teaching effectiveness nor the methods by which pupils best learn. Consequently, and again with optimism, professional researchers — behavioral scientists — took over responsibility for discovering scientific knowledge that would make teaching more effective and supervisors were relegated to implementing their findings. A highly supported R and D effort aimed at strengthening the research basis for teacher effectiveness followed. However, in the early 1980s, this effort is viewed pessimistically. The behavioral scientists are criticized as having had little impact on what or how students learn or, even worse, that their research is reinforcing inadequate goals of education. Nevertheless, the conduct of research as an underpinning to supervision will continue albeit in differing directions: (a) theoretical research to explain what occurs in classrooms and to get better ideas about what is involved in teaching and (b) practical action research whereby practitioners and researchers together try to resolve limited problems in particular school situations and to search for procedures that work in the hands of teachers.

Scientific Supervision as Part of the Scientific Management Movement

Early in this century, scientific supervision was viewed as an answer to the lack of clearly defined standards, a lack that made it difficult to determine which methods were proving best and which teachers were doing the best work. Franklin Bobbitt, for example, saw scientific supervisors as addressing two initial tasks: guiding teachers in the selec-

John D. McNeil is Professor of Education at the University of California at Los Angeles.

tion of methods and preparing and renewing teachers.[1] Supervisors themselves were to discover the best procedures for performing teaching tasks and to help teachers acquire these methods in order to ensure maximum pupil achievement. Basic to this early concept of scientific supervision was the need for a research basis for teaching — a replacement for supervision that appeared to be personal and arbitrary.

Examples of the kinds of information sought in deriving appropriate methods are seen in these questions regarding the teaching of addition in arithmetic: At what age should the 45 addition combinations be taught? What are the combinations that require much, medium, and little drill? Should the drill be oral or written? Is it best performed with abstract examples or in connection with concrete problems? What is the value of using exercises that involve vocational or civic motives?

Teacher preparation and renewal were to be undertaken only after identifying the teacher's weaknesses by measuring the teacher's knowledge of subject matter, understanding of methods and teaching processes, ability to see teaching in academic and social perspectives, endurance, and energy.

Scientific Supervision as Drawing on Research Studies and Applying a Problem Solving Method

By 1930, the difficulty of separating scientific supervision from the scientific study of education itself was apparent. Data generated from early investigations — experimental and statistical — aimed at yielding knowledge of optimum methods to be employed by teachers were deemed inadequate. Instead supervisors were to be familiar with the broad range of educational research and to use this knowledge in the appraisal, training, and improvement of teachers. Supervisors were to draw implications from research undertaken by educational psychologists interested in mental measurement, individual differences, and the psychology of learning; they were to construct, understand, and use new types of tests suggested by educational measurement experts; and they were to see that teachers formulated objectives in accordance with the curriculum experts' new techniques.

At this time, the concept of scientific supervision changed from that of regarding research findings as fixed conclusions, formulated into a pattern for all to follow, to that of regarding such findings as data for sharpening observation and directing further thinking. The influence of John Dewey's *The Sources of a Science of Education*[2] was apparent. Accordingly, the object of scientific supervision was the development of

[1] Franklin Bobbitt, "The Supervision of City Schools," in *The Twelfth Yearbook of the National Society for the Study of Education* (Chicago: University of Chicago Press, 1913).

[2] John Dewey, *The Sources of a Science of Education* (New York: Horace Liveright, 1929).

teachers who would attack their classroom problems scientifically, free from the control of tradition, and activated by the spirit of inquiry (the forerunner of action research). Supervisors and teachers together were to adopt an experimental attitude, trying out new procedures and studying the effects of each newly introduced means of improvement until satisfactory results were attained. An underlying assumption was that the efficiency of teachers would be increased through the guidance of a supervisor who would translate aims of the school into terms which the teachers understand, gain teacher acceptance of the aims and objectives, help teachers adapt the curriculum in light of community and individual factors, analyze teaching, and judge the quality of instruction and the efficiency of the results.[3]

Scientific Supervision as Democratic Ideology

In the early 1940s, scientific supervision took a new turn in response to political concerns and the climate of war. Principles associated with democracy — widespread participation, respect for personality, and the importance of eliciting the contributions of many in reaching a common goal — tempered the earlier admonitions that teachers should act in accordance with facts and principles that were reasonably well established by the process of science.

Indeed, supervisors were to help teachers apply scientific methods and attitudes only in so far as those methods and attitudes were consistent with the social values of the day. The formulating of hypotheses, the selecting of appropriate research designs, and the statistical analysis found in action research centered on instructional problems of importance to the participating teachers. Such scientific methods were to help teachers and supervisors collect data and draw conclusions that would be more sufficient and systematically organized than the facts and conclusions they would derive from their uncontrolled opinion. Although supervisors continued to study and relate the generalizable findings from research that seemed to have implications for school practice. they tended to cite only those studies that were consistent with the political ideology of the time. For example, a limited study comparing the effects of autocratic, democratic, and laissez-faire leadership by Lewin, Lippitt, and White, indicating the superiority of the democratic role over autocratic and laissez-faire roles, was taken as the defining answer regarding the most appropriate teaching style for the classroom.[4] This study had a more far reaching effect on practice than any other single piece of research, although it was faulty as an experimental study.

[3] A. S. Barr, *An Introduction to the Scientific Study of Classroom Supervision* (New York: Appleton and Company, 1931).

[4] K. Lewin, R. Lippitt, and K. White, "Patterns of Aggressive Behavior in Experimentally Created 'Social Climates,'" *Journal of Social Psychology* 10(1939):271-299.

The End of Scientific Research by School Supervisors

By the 1960s supervisors were no longer engaged with teachers in action research. Action researchers were criticized for their lack of quantitative methods and their failure to conceptually grasp the problems undertaken.[5] Educational science did not cement teachers into a self-governing expert group. Instead, research on teaching was about to be relegated to technically professional researchers, not supervisors and teachers.

The *Handbook of Research on Teaching* published in 1963 signaled an effort to put research on classroom behavior into contact with the behavioral sciences. The content of the book emphasized methodology for conducting research on teaching — theories, paradigms, statistics, and experimental designs. In focusing on the methods and concepts of the behavioral sciences, the authors of the handbook sought causal interpretation and explanation in contrast to the earlier positivist conception of science which limited inquiry to simple investigation into facts, such as experimental design to determine the relative effectiveness of phonics versus whole word method in the teaching of reading. The handbook both set the direction for future research on teaching and revealed the limited knowledge derived from previous research.

The paucity of knowledge about teaching variables and student achievement attained in the previous era was apparent. Little was known about the practical productivity and unexpected effects of given teaching methods. A research basis for guiding supervisors was still lacking. The following conclusions by experts who reviewed the status of knowledge regarding teachers are testimony to this uncertainty:

Procedures for Assessing Teachers. Ratings of teaching effectiveness have no discernible relationships to student gains. After 40 years of research on teacher effectiveness, one can point to few outcomes that supervisors can safely employ in hiring a teacher or in granting tenure.

Effects of Classroom Practices. There is a lack of both a formal system of pedagogical theory and knowledge about the relationship between particular classroom procedures and their educational consequences. Different kinds of teachers get varying amounts of achievement from different kinds of children.

Programs for Teacher Improvement. It is hard to find evidence that patterns of teacher behavior are generated by teacher training. Teaching behavior has little to do with scientific knowledge of learning. Instead, most teaching patterns are influenced more by tradition and the personal needs of teachers than by research on teaching. The teacher is formed by the social situations imposed by the job, especially by the teacher's relationship with students. A teaching method cannot be designed in terms of a set of laws of learning alone. It must also include a

[5] H. L. Hodgkinson, "Action Research — A Critique," *The Journal of Educational Sociology* 31, 4(1957):137-153.

set of laws that characterize the consequent behavior of the teacher. We have no such laws.

Teacher Characteristics. The relationship between psychological malfunctioning and teaching effectiveness is low. There are inconsistent findings regarding the relationship of the teacher's intellectual power and success in teaching. Little is known about the relationship between teaching personality and teaching effectiveness.

Teaching in Nursery Schools. The body of knowledge regarding nursery school teaching is spotty and unorganized. Statements about teaching method are so tentative that they are of little value.

Teaching in Higher Education. When one is asked whether lecture is better than discussion, the appropriate counter is "For what goals?"

Teaching Reading. There is considerable difference of opinion among experts on reading methods. Research has not given much help in identifying developing skills, appropriate attitudes, or flexibility necessary when reading for different purposes and reading different kinds of materials. There seems to be no "best" method for all children learning to read.

Teaching Science. Research on the relationship between the behavior of science teachers and other variables, such as the behavior of their pupils, is meager.

Teaching Math. Evidence about the consequences of tell-and-do methods versus heuristic methods is not conclusive. One should be wary of adopting one method or another on the basis of the evidence available.

Teaching Composition. The transfer value of grammar to the writing of compositions depends on the particular grammatical ability involved. We do not know what specific items of grammatical knowledge hold the greatest promise for improving composition skills.

Teaching Social Studies. Research on the outcomes of any given technique has yielded conflicting results.

Teaching Visual Arts. Those in this field do not seek a single set of procedures for teaching art. There is no theoretical base that is correct to the exclusion of other points of view.

Teaching Foreign Language. There is no adequate classroom experimentation. There is no research from which to draw useful conclusions for teaching grammatical habits. The problem of optimal methods of teaching pronunciation is practically untouched. There is a dearth of evidence on methods of teaching reading in a foreign language.

Similarly, A. S. Barr's summary of studies related to the measurement and prediction of teacher effectiveness indicated little was known.[6] During a period of nearly 40 years beginning with his experience as director of supervisors in the public schools, Barr sought to apply the

[6] A. S. Barr et al., "Wisconsin Studies of the Measurement and Prediction of Teacher Effectiveness — A Summary of Investigations," *Journal of Experimental Education* 30, 1(September 1961):1-153.

scientific approach to objectifying teaching. Under his direction, teachers, supervisors, and 75 doctoral candidates carried out studies of teaching effectiveness. Almost every conceivable aspect of teaching ability and evidence of efficiency was explored: interests, attitudes, behaviors, knowledges, skills, and personality traits. In looking back over these investigations, Barr asked, "What progress has been made?" His answer was that some progress had been made in clarifying the problem. He correctly saw that the problem that needs clarifying before all others is the criterion of teaching effectiveness. Different people employ different criteria and approaches to the evaluation of teachers. Some prefer to approach effectiveness from the point of view of personal prerequisites; some from teacher-pupil behaviors; some from basic knowledge, attitudes, and skill; and some from the point of view of results or products. These different approaches give different answers to the question, "Is this teacher an effective teacher?"

Other problems include the difficulties of (a) isolating teacher influence from the influences of home, peers, and environment and (b) relating the specific teaching acts to larger ends. (Supervisors tend to infer significance of specific acts to larger purposes, but they have not established the validity of their inferences according to the canons of science.) A number of unresolved problems are associated with the need for assessing how teachers make decisions with respect to pupil needs, means of instruction, rewards, punishments, and standards. Supervisors themselves should be tested by demonstrating their ability to improve a teacher's effectiveness through the manipulation of variables thought to be associated with effectiveness. One of Barr's most important conclusions is that the constituents of effectiveness are not found in teacher, pupil, or in situation, but in the relationships that exist among the three at any given time and place.

Current Teacher Effectiveness Research

A Technology of Instruction Based on Learning and Behavior Theory

Behavioral scientists thought that the problem of effective instruction could best be met by applying psychological theories of learning and the results of experiments involving controlled manipulation of specific factors. The development of teaching machines and programmed instruction became the vehicle for generating ideas about critical instructional variables and for testing their effects. B. F. Skinner, in connection with the design of teaching machines, drew attention to the importance of such instructional variables as active overt responding, elicitation of covert responses, reinforcement, and knowledge

of results. Psychologists, such as A. A. Lumsdaine[7] and R. M. Gagné,[8] who had been engaged in training research for the military in World War II, sought to develop an instructional technology by which a teacher could be aided and made more effective.

Lumsdaine stressed the need for controlled experiments showing the influence of specific factors that consistently influence the outcomes of instruction. Some of his conclusions were that overt responding is less important in meaningful context learning than in rote learning and that such responding is likely to be greatest with very young children and with difficult material; there is value in prompting or cueing student responses in learning a procedural skill; and that learning may be enhanced by repetition, pacing, example, review, and opportunity to repeat missed items. He urged better definitions of variables and analysis of their interactions as well as empirical demonstration of the effects of these variables in particular instructional programs.

Gagné stressed the idea that achievement of the objectives of an instructional program depends on whether or not the learner has attained the learning prerequisites to the task that the program is designed to teach. Accordingly, the teacher would have to decide on the ultimate goal and determine the subskills necessary to progress smoothly to the goal, keeping in mind the methods and materials to be used. Knowing the components of a logical and hierarchal sequence and the use of this sequence in preparing diagnostic tests to assess the learners' preparation offers considerable possibility for improving instruction.

J. B. Carroll presented a conceptual model of the learning process that proposed that the success of learning is a function of five elements[9]:

1. Aptitude — basic characteristics that influence the time sequence for one to attain mastery of a task
2. Intelligence — the ability to understand the task to be learned and the procedures to follow in learning the task
3. Perseverance — the amount of time during which one will engage in active learning of the task
4. Quality of instruction — the degree to which elements of the task are well presented, explained, and ordered
5. Opportunity for learning — the amount of time allowed for learning reflected in the pacing of instruction relative to the students' capacity to profit from it.

While the first three elements reside in the learner, the latter two reside in the teaching.

[7] A. A. Lumsdaine, "Educational Technology, Programed Instruction, and Instructional Science," *Theories of Learning and Instruction*, 63rd Yearbook of the National Society for the Study of Education, Part I, 1964, pp. 371-401.

[8] R. M. Gagné, *The Conditions of Learning* (New York: Holt, Rinehart and Winston, 1967).

[9] J. B. Carroll, "A Model of School Learning," *Teachers College Record* 64 (1963):723-733.

The technology of instruction emanating from the work of these behavioral scientists had a great impact on both school practice and the conduct of research on teaching effectiveness. Government supported agencies such as regional laboratories for research and development created curriculum materials that followed the technologists' demands for specification of objectives; measures that match the objectives to use in evaluation; delineation of the component skills requisite for achievement of the objectives; prototype development and tryout; and testing of the learning sequences in both laboratory and field situations to find out to what extent they attain desired results. Publishers of instructional materials also adopted features of the new educational technology, such as specific objectives, continua of skills, criterion-referenced tests, and provision for immediate feedback.

The application of technology to the development of instructional products constitutes an indirect form of supervision, that is, product developers external to the classroom determine objectives of instruction and provide the means to attainment. Although it has been more popular to focus on teachers as the way to affect instructional improvement, behavioral scientists with a product development orientation assumed that by improving materials, they would improve educational practice.

Technology of instruction was not only applied in the development of products. Instructional procedures associated with mastery learning, personalized teaching (The Keller Plan),[10] individually-guided instruction, and other popular innovations are based on the concepts and work of the behavioral scientists. Indeed, one can make the case that present trends in competency-based education and performance testing are dependent on the technologists' notions of prespecified objectives, criterion measures, and direct practice with important skills.

Criticism of learning theory as a basis for guiding teaching practice was forthcoming. W. J. McKeachie attacked Skinner and programmed instruction as well as the laws of learning themselves as applied to human learning.[11] He challenged the usefulness of the concept of reinforcement by citing incidents when children do less well in learning when materially rewarded, and the concept of knowledge of results by citing evidence showing that knowledge of results does not always produce better learning and that feedback and praise do not always lead to improvement. McKeachie attributes the popularity of psychological principles and the technology of teaching to their simplicity; the basic ideas are simple to apply and they work often enough to maintain enthusiasm for them.

[10] F. S. Keller, *The Keller Plan Handbook* (Menlo Park, Calif.: W. A. Benjamin, 1974).

[11] W. J. McKeachie, "The Decline and Fall of the Laws of Learning," *Educational Researcher* 3, 3 (March 1974): 7-11.

The Process-Product Paradigm

N. L. Gage is a representative proponent of an approach by which investigators search for teaching processes (teacher behavior and characteristics) that predict or cause student achievement and attitude. This approach is similar to that followed by A. S. Barr and others in a prior era of criterion of effectiveness studies. As stated previously, this approach as carried out in the past failed to produce conclusive knowledge for a variety of reasons: failure to control for the intervening events between teaching behavior and outcomes; failure to get at the meaning behind teacher behavior; failure to attend to the variables that are unstable but important in bringing about learning; and failure to recognize that the relation between teacher practice and results need only be better than chance. Gage sees some ways of overcoming these failures and holds that the approach will lead to a scientific basis to teaching.[12] He does not look for a science whereby good teaching is attainable by following laws that yield predictability and control. Instead, he aims at scientific findings that will allow teachers to know that certain teacher behaviors are likely to have an effect on what students learn.

Inasmuch as the number of variables referring to teacher behavior, pupil behavior, and classroom environment number in the hundreds, Gage recommends instructional treatments that combine teacher variables found to correlate with pupil achievements into combinations of components. Should the combination improve achievement, further analysis can show the relative influence of the individual components.

By testing the significance of combined results through an estimation of the "nonchanceness" of a number of independent findings related to a process variable, Gage has been able to find effects that were masked in isolation. This situational technique is aimed at overcoming the failure to find significant correlations due to small sample size. After sifting several hundred variables in teacher behavior, Gage developed a set of inferences as to how third-grade teachers should work if they wish to maximize achievement in the basic skills. Most of these call for optimizing academic learning time:

- Establish classroom rules that allow pupils to attend to personal and procedural needs *without* having to check with the teacher
- Move around the room a lot, monitoring seatwork and attending to academic needs
- When pupils work independently, ensure that assignments are interesting and worthwhile, yet easy enough to be completed without teacher direction
- Spend little time in giving directions and organizing the class
- Call on a child by name *before* asking questions to ensure that all have opportunity to respond.

[12] N. L. Gage, *The Scientific Basis of the Art of Teaching* (New York: Teachers College Press, 1978).

D. M. Medley claims to have overcome other limitations of process-product research by summarizing the results of studies of teacher behavior that used pupil gain after several months of instruction as the criterion of effectiveness.[13] He concluded that the following three kinds of teacher behavior have strong enough relationships to effectiveness that they can be considered dependable:

Learning environment — the effective teacher has a classroom that is orderly and psychologically supportive.

Use of pupil time — the effective teacher devotes more time to academic activities with the class organized in one large group. Although effective teachers devote less time to pupil seatwork than ineffective ones, they supervise pupils engaged in seatwork more closely.

Method of instruction — contrary to popular opinion, teachers who use more low-level questions and whose pupils initiate fewer questions and get less feedback or additional amplification of their questions are associated with higher pupil gains.

Medley's research is consistent with the findings from a number of process-product researchers. For example, B. V. Rosenshine found that of ten promising variables two that showed the highest correlation with achievement are those related to content covered (opportunity to learn what is being tested) and task orientation or academic focus.[14] The work of D. C. Berliner and others at the Far West Laboratory for Educational Research and Development; the research of J. E. Brophy and C. M. Evertson further supports the value of teachers giving direct supervision to pupils in order to ensure academically engaged time.[15]

Impact of Process-Product Research on Supervision

The impact of this process-product research has been great. Supervisors now emphasize staff development programs aimed at getting teachers to apply a method called "direct instruction," a method derived from research findings regarding the apparent importance of academically focused teacher-directed classrooms. In accordance with direct instruction, teachers are expected to make goals or objectives clear to students, to allocate time for instruction in sufficient and continuing amounts, to match the content presented to that which will be measured on tests of achievement, to monitor the performance of pupils, and to keep questions at a low level so that pupils have a high success rate while learning and to give immediate feedback to students. Unlike the teaching model of the 1950s, the "good" teacher is neither

[13] Donald M. Medley, "The Effectiveness of Teachers," in *Research on Teaching*, ed. P. L. Peterson and H. J. Walberg (Berkeley, Calif.: McCutchan, 1979), pp. 11-27.

[14] B. V. Rosenshine, "Academic Engaged Time, Content-Covered, and Direct Instruction," paper presented at AERA, New York, 1977.

[15] D. C. Berliner et al., *Phase III of the Beginning Teacher Evaluation Study* (Far West Laboratory for Educational Research and Development, 1976); J. E. Brophy and C. M. Evertson, *Process-Product Correlation in the Texas Teacher Effectiveness Study* (Austin, Tex.: University of Texas, 1974).

laissez-faire nor democratic but controlling. The teacher controls the instructional goals, chooses materials appropriate for the student's ability, and paces the instructional sequence.

Action research has been reintroduced as a way to sensitize teachers to the importance of time-on-task. Supervisors in the San Diego City Schools, for instance, involved teachers and researchers to determine what keeps teachers from giving more time to direct academic instruction. They found that organizational and management problems within the classroom were the chief obstacles, not external interruptions. Teachers often did not have the solutions for the problem of a productive classroom climate.

B. S. Bloom points out that although supervisors have always recognized time as a central factor in learning, they are now giving more attention to improving instruction so that pupils will give more time-on-task. The key is that pupils comprehend what is being taught and what they are to do.[16] Identification of specific knowledges, abilities, or skills that are essential prerequisites for the learning of a particular task and teaching these prerequisites accounts for much of the success attributed to mastery learning. Bloom is also concerned that teachers are frequently unconscious of the fact that they do not provide equal opportunity for learning to all students. Thus, he recommends that supervisors help teachers secure an accurate picture of their interactions with students.

In the 1920s, supervisors stressed time-on-task and student attention from a preoccupation for efficiency, effectiveness, and productivity. In the 1940s, they downplayed time-on-task as being too mechanistic and authoritarian for democratic classrooms. Now, partly as a result of the process-product studies and the studies of mastery learning, supervisors are looking to this variable as the answer to improvement of teaching and learning. Therefore, supervisors encourage teachers to be aware of their allocation of time in class, to the manner in which pupils utilize that time, and to how meaningful the task is to the pupil.

In her workshop for supervisors, Madeline Hunter, for example, has influenced staff development in the direction of clear indications of lesson objectives, expected work patterns, criticizing assignments — all of which represent proactive rather than reactive teacher behavior.[17] Her prescriptions for teachers are as follows:

1. *Diagnosis* — Identify a major objective and the status of learners in relation to this objective.

2. *Specific objectives* — On the basis of the diagnosis, select a specific objective for a particular group's daily instruction.

[16] B. S. Bloom, "The New Direction in Educational Research: Alterable Variables," *Phi Delta Kappan* 61, 6 (February 1980): 282-305.

[17] Doug Russell and Madeline Hunter, *Planning for Effective Instruction* (Lesson Design) (Los Angeles: University Elementary School, 1980).

3. *Anticipating set* — Focus the learners' attention, give brief practice on related learning previously achieved, and develop a readiness for the instruction that will follow.

4. *Perceived purpose* — Inform the learners of the objective, indicating why its accomplishment is important and relevant to present and future situations.

5. *Learning opportunities* — Select learning opportunities that promise to help learners achieve the objective.

6. *Modeling* — Provide both a visual example of what is to be attained (product or process) and a verbal description of the critical elements involved.

7. *Check for understanding* — Check for learners' possession of essential information and skills.

8. *Guided practice* — Circulate among students to see that they can perform successfully before being asked to practice independently.

9. *Independent practice* — Once learners can perform without major errors, they should be given opportunities to practice the new skill or process with little or no teacher direction.

The Process-Product Paradigm and Practices that Follow From It

Some of the limitations of the process-product paradigm are overcome by applying newer statistical techniques, such as meta analysis,[18] and by conducting experimental studies in which the variables identified through correlation studies are manipulated — acted on by teachers — to determine if they have a causal influence. However, serious problems remain. Chief among them are those mentioned by Barr long ago — the difficulty of getting agreement on the criterion of effectiveness and the problem of implementing the implications of research findings into unique classroom situations.

Process-product researchers use controversial definitions of achievement. Their definitions are chiefly mastery of narrowly defined skills in arithmetic and reading, a closed set of performance and information. Mastery is usually measured by an achievement test measuring low levels of understanding, such as recall and comprehension, rather than application and evaluation. We do not know that the education of pupils is advanced by teachers who follow the newly prescribed processes, only that certain skills are attained. There is no validation of these prescribed processes to other definitions of literacy, such as critical thinking and invention.

The use of a questionable criterion for effectiveness might account for some of the unexpected findings from process-product research. Consider the low correlations between the asking of high level questions

[18] G. V. Glass, "Integrating Findings: The Meta Analysis of Research," in *Review of Research in Education*, 5. ed. L. S. Schulman (Itasca, Ill.: Peacock, 1978).

by teachers and achievement of pupils. Inasmuch as achievement tests demand low level responses, it follows that high level questions are less appropriate. Also, findings showing the superiority of direct instruction whereby teachers exercise control are unacceptable to those who value self-directed learning and the student's own sense of personal control.

In her examination of studies that seem to favor direct instruction, P. L. Peterson found that only small effects were attributable to such instruction.[19] Indeed, the data on effect size suggested that while the average student tended to achieve more with direct instruction, the difference between this instruction and an individual or open approach was only one-tenth of a standard deviation. Further, Peterson found the non-direct rather than the direct instruction to be more associated with creativity and problem solving.

Teacher difficulties in acting on research findings are numerous. By way of example, teachers are confronted with the dilemma of following a set of teaching procedures designed to attain high levels of pupil time-on-task by concentrating on whole class settings, while at the same time pursuing a path aimed at maximizing the individual meaningfulness of instruction requiring individualized activity. Consider, too, the relative difficulty of getting active learning time in a classroom where pupils are motivated to learn as opposed to one where pupils view school tasks as aversive stimuli. The dependable finding that effective teachers have orderly classrooms may be only an artifact. Orderly pupils may just as well produce an effective teacher as an effective teacher cause an orderly class.

Acquiring an understanding of the reasons for the considerable day-to-day fluctuation in pupil engagement is unlikely to come from reliance on process-product research. There is a need for action research in widely different classroom contexts whereby participants attend to variables outside of those offered by the behavioral scientists. No matter how well planned a lesson, effective teaching will remain difficult because of the many changing cues to which teachers and students must respond. Supervisors and teachers sense the uselessness and absurdity of some of the conclusions from product-process research.

G. D. Fenstermacher[20] offers the view that behavioral scientists err in believing that what teachers do is more important than what teachers think. He would have supervisors give more attention to helping teachers think and feel differently about what makes teaching worthwhile. Getting knowledge about teaching and getting teachers to be effective are two different activities. Instead of asking: "Do these teachers' behaviors produce *x* effect?", supervisors should ask, "Why do these

[19] P. L. Peterson, "Direct Instruction Reconsidered," in *Research on Teaching and Concepts, Findings and Implications*, ed. P. L. Peterson and H. J. Walberg (Berkeley, Calif.: McCutchan, 1979), pp. 57-69.

[20] G. D. Fenstermacher, "A Philosophical Consideration of Recent Research on Teacher Effectiveness," *Review of Research in Education* 6 (1978): 157-186.

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teachers perform as they do?", looking for relationships between performance and teacher intentions. The relation between thought and action may be the critical issue in research on teaching.

The Future of Scientific Supervision

One of the United States' great strengths is the extraordinary development of science and technology which is a direct consequence of the freedom of investigation and criticism. Also, the American national character is rooted in optimism — "A sense of efficacy." Our problems can be solved. We shall make life better. It is not surprising then that a scientific approach to supervision — that we can find out why some people are more effective teachers than others and that we can use this knowledge to help teachers become effective — is a central dimension in the supervision field. There are other reasons as well. Supervisors want a knowledge base to free them from charges of personal arbitrariness in their supervisory practice. Teachers, even though they at times distain the results of scientific inquiry into teaching, see the need for such activity, if only to strengthen the myth that teaching is a profession as evidenced by the use of scientifically validated procedures which are not possessed by and which cannot always be judged objectively by the general public.

On the other hand, the case for scientific supervision has not been won. Just as there is an erosion in the American's faith in science, so there is a lack of confidence that research in teacher effectiveness will ever fulfill its promise. The search for effective teaching methods and teachers is like the search for the Holy Grail. Not all teachers can be successes because we are dealing with an art, and there are no formulas for art.

Limitations to the Scientific Approach to Teaching Effectiveness

Future scientific research into supervision will probably follow the direction of social research in general.[21] This means that scientific supervision will be seen as only one among several analytical methods for improving instruction. Other forms of information and analysis, including the ordinary knowledge of supervisors and teachers, may be more effective than the results of scientific inquiry. Ordinary knowledge is not won by the methods of science but by common sense, empiricism, and thoughtful speculation. Such knowledge is highly fallible, but, nevertheless, knowledge to anyone who takes it is a basis for action.

[21] C. E. Lindblom and D. K. Cohen, *Usable Knowledge* (New Haven: Yale University Press, 1979).

The Limited Contribution of Research to Improving Teaching

Research has been limited in its contribution to teaching practice for a number of reasons:

1. The number of propositions produced by a scientific approach is tiny compared to the judgments and guidelines employed in teaching.

2. Researchers of teaching refine ordinary knowledge more than they create new knowledge. The researchers' newly found alterable variables of time-on-task, prerequisites to learning, pupil opportunity to participate, home environment, teachers' attitudes toward children, feedback and corrective procedures have circulated as part of teachers' and supervisors' ordinary knowledge for generations.

3. Researchers refine knowledge in a highly selective fashion. Only a few of the propositions from ordinary knowledge are tested by researchers, and of these only a few are given a high degree of verification.

Indeed, Walter Doyle has called for a fundamental conceptual reorganization of research on teaching on the grounds that present variables found to be associated with achievement, such as time-on-task, may be leading to spurious interpretations.[22] These teaching variables are assumed to cause student behavior when it may be that the student behavior, such as specifying time in learning, is a factor of teacher adaptation to students or students' need for authority. Doyle would reorganize research so that less attention is given to teacher behavior as the treatment variable and more attention is given to the nature of the tasks students are trying to accomplish. Examples of task variables are degree of risk and ambiguity. Other variables of importance are the meanings students give to the objects and events they encounter in instruction. Admittedly, research conducted along this reconstructed line would not increase knowledge about effective teaching patterns, but might provide an analytical framework for helping teachers interpret the problems they meet in their specific classrooms.

4. There is little hope that research will bring authoritativeness to supervision. Research does not cover the whole terrain of classroom problems. Also, many of the scientific findings will be rejected on other grounds — political, economic. Further, teachers and supervisors will not agree that any finding is sufficiently established to serve as the final word of authority. The most authoritative knowledge is that which has been confirmed by research *and* corresponds to the ordinary knowledge of teachers. Ordinary knowledge that children achieve more when they engage in appropriate learning tasks, that learning opportunities should not be frustrating, and that low teacher expectations preclude pupil

[22] Walter Doyle, "Learning the Classroom Environment: An Ecological Analysis," *Journal of Teacher Education* 28 (1977): 51-55.

progress are more authoritative statements than some of the findings from the behavioral scientists' process-product research.

5. Many scientific findings regarding teaching effectiveness are divergent. When there are divergent views — teacher praise and criticism, class size, open structure, value of drill, pupil choice, concurrent versus transference methods in bilingual education — then supervisors and teachers take only the view that is consistent with their ordinary knowledge as authoritative and act on it. The other view is dismissed as being incorrectly defined or the research design and sample are said to be faulty.

Optional Directions in the Scientific Approach

In view of the lack of authoritativeness of educational research regarding methods and effective teaching, how should it be redirected? One option is for researchers to forsake the search for practical solutions to well-defined problems and instead attend to the functions of fundamental enlightenment of thought as achieved by those such as Dewey, Piaget, Chomsky, and Freud. Members of the National Academy of Education in their recent review of instances of research that have influenced educational practice credited theoretical ideas as having the greatest impact, not hard-core statistical demonstrations.[23] Accepting the goal of enlightenment rather than social engineering sets new tasks for researchers on teaching. Instead of aiming at authoritativeness and testable scientific propositions, they would try to clarify understanding of the classroom and its problems. Conceptualization which might include alternative ways to enhance learning would be an example of such activity.

A second optional direction is for researchers to return to the earlier practice of action research and limit themselves to highly selective but restricted questions of importance to a local community. The argument for this direction is that problems of teaching require a wide range of outlooks and participants, not just problem solving. The interactive problem solving of action research is an alternative to solving problems, understanding, thought, or analysis from the viewpoint of a particular source of knowledge. Researchers using forms of human interaction for the purpose of reducing a problem have the advantage of implementing knowledge as well as finding it.

A third direction is to pursue the ideal of objective experiments on children, attempting to modify them by the process in question. Such efforts to improve the science of pedagogy will be difficult because they involve entanglements with questions of both ends and means. The sciences from which pedagogy draws, particularly psychology, often limit the inquiries undertaken.

[23] P. Suppes, ed., *Impact of Research on Education: Some Case Studies* (Washington, D.C.: National Academy of Education, 1978).

A fourth direction is to improve teaching through fact-finding studies, adding to knowledge about teaching problems: who are the achievers, non-achievers, where are they, and what do they lack. Although reporting may seem insignificant compared to other dimensions of scientific undertakings, researchers have a higher success rate in this activity than in achieving scientific generalizations. Further, the facts uncovered may contribute to solving problems of teaching.

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Trends

Supervision

ROBERT J. KRAJEWSKI

Understanding the Why's of Instructional Supervision

Why is it that so many teachers do not receive the instructional improvement support and services they feel they need? Why don't schools have an abundance of improvement programs? These are complex questions that lead to others with deeper implications for supervision. Are there enough instructional improvement personnel? Do they have the necessary preparation and skills to carry out their instructional improvement role? Do they understand what their role entails? And do their job requirements give them sufficient time to devote to that role? Perhaps in our zest to excel in instructional improvement, we have been too quick to respond to the *how*'s and have ignored the *why*'s.

Understanding instructional supervision is not easy, and implementing an instructional supervision program remains a persistent challenge. Most supervisors develop assumptions, principles, hypotheses, and conceptual frameworks on which to base their theories and build their supervision ideas. They express concern that instructional supervision is too often thought of as a process that focuses on specific skills, advantages, time constraints, or motivation techniques. Without the reasons behind the processes, it is nearly impossible for supervisors to communicate effectively with teachers. Both supervisors and teachers must be aware of the why's, and any instructional supervision model must integrate the why's with the how's.

From the instructional supervision literature and from practice, I chose six key elements that *together* provide a firm foundation for building a viable instructional improvement program.

1. *Instructional supervision requires a perceiving, behaving attitude.* The most important task instructional supervisors face is relating to the affective. Crucial to success is forming and maintaining a positive attitude and enthusiasm toward instructional improvement. Just as a prerequisite for effective teaching is a teacher's acceptance of self, so too must the instructional supervisor know, accept, and respect self as a prerequisite to working effectively with teachers and guiding their instructional improvement efforts.

Wilhelms (1973) believes that the only teachers who can really do the job are those who somehow feel good about themselves, the people they work with, and the world they work in. The same holds true for supervisors. Effective instructional supervision requires that supervisors be in touch not only with themselves but with colleagues as well. Knowing and accepting self-limitations allows supervisors to better accept colleagues, work with them as they are, and encourage them to accept themselves and to accept students. Most important, such behavior facilitates a perceiving, behaving attitude and enhances supervisors' encouraging a like attitude in teachers.

2. *Instructional supervision requires a becoming attitude.* Supervisors who try to do their best for instructional improvement and who model improvement in their own professional behavior will hold similar expectations of the teachers with whom they work. The concluding sentences of ASCD's *Perceiving, Behaving, Becoming* (Combs, 1962) note that the person who has values, a positive view of self, is creative, open to experience, responsible and trustworthy, well informed, and aware that he or she is in the process of becoming, is the person most able to survive and deal with the future. Our actions speak louder than words. Confidence in self encourages confidence in others; others become what we expect and help them to be.

3. *Instructional supervision requires nurturing of mutual trust and rapport.* Rapport—a harmonious relationship, especially one of mutual trust—is vital. Trust is the foundation of instructional supervision; its development must be continually promoted and nourished. While perceiving, behaving, becoming attitudes are necessary prerequisites, rapport nurturance is the binding element for instructional supervision.

4. *Instructional supervision requires sufficient preparation.* Through preparation programs, prospective supervisors must acquire a thorough knowledge base of instructional skills and theory as well as an ability to apply that theory in the practical world of teaching. Too often, however, supervision credential programs lack this important feature or address it only minimally. Without necessary skills in planning, observing, and analyzing teaching; conferencing and counseling with teachers; and planning and implementing improvement programs with teachers; instructional supervisors cannot fulfill their role expectations. And without sufficient preparation, supervisors cannot acquire these necessary skills.

5. *Instructional supervision requires role delineation.* A supervisor helps teachers and supervisors understand and accept their respective roles. In supervision, role delineation is concomitant with colleagueship, for while the supervisor is responsible for developing and implementing instructional improvement programs, the teacher is the critical link to student learning. Preparing teachers for instructional improvement means getting all teachers involved in instructional program decisions, promoting idea sharing and a sense of program ownership. It also means assuming leadership by setting realistic growth goals and availing yourself as a facilitator to accomplish the goals.

6. *Instructional supervision requires productive tension.* Behavior change produces tension for both teacher and supervisor. Supervisor tension—due in part to incongruency between job expectations and lack of sufficient preparation—is perhaps even greater than that of the teacher whose instructional behavior is analyzed for improvement. Teacher tension—wheth-

Robert J. Krajewski is Professor and Head, Department of Educational Administration and Counseling, University of Northern Iowa, Cedar Falls.

Trends

er from neophytes wishing to succeed or experienced teachers wishing to maintain/enhance teaching skills—is variable. Throughout the instructional improvement program, the supervisor's responsibility is to keep the tension productive—a sometimes awesome responsibility.

Every supervisor preparation program should address both the concept and the process of instructional supervision, as should supervisor inservice programs. Too often meager program attempts either confuse or promote false confidence with minimum process skills. Were the why's to be better incorporated into the preparation program, *supervisors* would be better equipped to design and implement instructional improvement programs. Similarly, were the why's to be better incorporated into instructional improvement programs, *teachers* would be better prepared to accept and help implement their professional growth and to effect greater student learning.

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The Supervisory Skill Mix

Efficient supervisors have three kinds of skills: human, managerial, and technical. While human relations and management are important, technical skills must not be neglected.

Robert J. Alfonso, Gerald Firth, and Richard Neville

A major deterrent to full professional status of educational supervisors is an ill-defined knowledge base and lack of an agreed-upon set of professional skills. Every profession equips its members with a conceptual and intellectual base from which skills are derived and expressed in practice. The skills of instructional supervision, however, have remained remarkably undefined and random, partly because the theoretical base is so thin. Moreover, the skills that are used are generally acquired on the job, rather than during professional preparation and internship. Lortie, commenting on this condition, said:

> The structure of public schooling which emerged from the nineteenth century had two major mechanisms for improving teacher performance. One was a modified principle of professionalization based upon faith in increased general and public schooling. The second was the principle of bureaucratic control wherein administrative superiors would raise performance levels by supervising teachers. We have seen that the first principle has not produced a powerful technical culture to guide teachers in their pedagogical behavior. But the second remains: Is there evidence to suggest that a technical culture of teaching resides in the supervisory arrangements in public schools?[1]

If Lortie's question evokes a positive response, it would be difficult to confirm from the requests made by teachers for supervisory assistance. Teachers consistently report that their primary source of help is other teachers,[2] and they are critical of the amount and quality of assistance they receive from instructional leaders.[3] When instructional supervisors lack skills directly related to the work of classroom teachers, teachers are forced to turn elsewhere for help. Consequently, supervision is frequently seen as unrelated to the improvement of instruction. Occasional supervisory visits to classrooms merely highlight for teachers the episodic character of the supervision.

Supervisors are charged with a multitude of essential tasks. Most sweeping is

their responsibility for improving instruction. They are expected to be instructional experts, diagnosticians, curriculum developers, instructional planners, problem solvers, innovators, clinical observation specialists, and managers of the processes of teaching and learning. In addition to these critical instruction-related tasks are a variety of other school activities. Much of the literature in instructional supervision has addressed these supervisory tasks and the "role" of supervision, yet it has given too little attention to the identification and development of the skills needed to make supervision effective.

The field of instructional supervision during the last three decades has emphasized the human relations and process skills of supervisors with only passing reference to a larger repertoire that might be required. The contribution of Goldhammer, Cogan, Anderson, and others[4] in recent years to the development of clinical supervision is a refreshing departure from the days of admonition and description. Yet even they take a rather narrow view of where and how supervision is to be played out. No single skill or limited set of skills can make supervision effective; instructional supervision requires a wide array of behaviors, demonstrated in a highly complex, human organization, and undergirded by essential concepts and knowledge.

Although the literature on instructional supervision in recent decades has emphasized human relations, supervisors themselves have continued to engage in extensive management or quasi-administrative behavior. This is perhaps understandable, considering the extensive physical structures and management systems required to run increasingly large and complex school systems. While the focus of supervisory activity is often that of self-selection or personal preference, it may also be true that supervisors have avoided classroom contact and direct attempts to influence instruction because they lack the skills to do so. One does what is most comfortable and where success is most likely—or where the risk of failure is least.

A continuation of management oriented supervision is no longer feasible, for the task of supervision now is to refine the process of teaching and improve the effectiveness or the results of schooling.

Three Types of Skills

Katz identified three basic skill areas for administrators: human, technical, and conceptual.[5] Mann, in extending and restating Katz's work, described the three classifications of supervisory skills as human, technical, and administrative or managerial.[6] In particular, he emphasized the mix of these skills as the key to supervisory competence.

Mann defined *technical* skill as the specialized knowledge and ability required to perform the primary tasks inherent in a particular supervisory position, and *human relations* skill as the ability to work with people and motivate them so they will desire good performance. *Managerial* skill is the ability to make decisions and see relationships that are crucial to the organization or unit goals for which the supervisor is responsible.

The concept of the supervisory skill-mix can be applied to any organization, although there are different skill requirements at different organizational levels. Mann noted that at first-line supervisory levels, technical and human skills are of primary importance, while at higher levels the need for managerial skills is greater. He also found that the skill-mix differs depending on the stage of growth and development of an organization. In a young organization, human relations and technical skills are particularly essential, but as an organization matures, managerial skills assume increased importance. Mann further observed that technical skills are particularly crucial during periods of change.

Examples

An example of a *human* skill is generating goal commitments. Instructional supervisors must be able to translate or interpret organizational goals in such a way as to cause teachers to be committed to them. This skill differs from that of planning for goal attainment, which is more of a managerial task. Clarifying

"The supervisory skill mix can be applied to any organization, although there are different requirements at different organizational levels."

Robert J. Alfonso is Vice President of Academic Affairs, East Tennessee State University, Johnson City, Tennessee; Gerald R. Firth is Acting Dean, College of Education, University of Georgia, Athens; and Richard F. Neville is Dean of Arts and Sciences, University of Maryland, Catonsville.

"It is not surprising that supervisors are most effective with managerial, then human, and last, technical skills."

values is another example of a human skill. Supervisors need not be expert in values clarification, but they should be able to employ some of the techniques.

An example of a *managerial* skill is needs assessment: helping teachers identify what they believe to be ideal and then collecting data about how conditions really are. Needs assessment can be a valuable contribution to a change effort and an appropriate precursor to planning, inservice, or staff development. Essentially, it is a planning tool and therefore a managerial skill.

One *technical* skill is the ability to use a classroom observation system. A wide range of observation systems are available, and a supervisor ought to be competent in several of them. The purpose of this skill is to better analyze and understand the process of instruction as it is expressed in a given context or class. It is directly related to the craft of teaching, takes place on-site, and is a clear example of a technical skill not generally found in other professions.[7]

The components of the supervisory skill-mix are not to be applied independently. It is the selection and application of an appropriate combination of skills that makes instructional supervision effective; the mix is of far greater importance than the individual skills. The skill-mix can be applied to a variety of professional roles, in schools as well as in other formal organizations. Within an educational organization, some of the same skills might be found in several different roles—principal, supervisor, and curriculum director, for example—and there might even be some skills common to all. What distinguishes a professional role, however, is the particular combination of skills and the frequency with which some of them are used.

It is not surprising that supervisors use and are most effective with managerial, then human, and last, technical skills. Although supervisors tend to rely too heavily on them, managerial skills are essential; they require the ability to develop and maintain an effective and productive relationship between an individual unit (department, grade level, or school) and the larger organization. They also require a broad view and the ability to go beyond immediate demands in order to analyze comprehensive organizational developments and needs. Through managerial skills the supervisor is able to provide the conditions necessary for a teacher or staff to be effective.

Managerial tasks are so demanding, however, that they often divert the supervisor's attention from the application of other skills in the mix. Using a preponderance of managerial skills can result in supervision that is long on style but short on substance.[8]

Similarly, human skills are a vital part of supervision. The supervisor's world requires working with and through other people—it is a world of influence and human interaction. The human aspects of an organization also are the most complex. Although human skills can be overemphasized, they are crucial. The supervisor who seeks to create an atmosphere of support and positive human relationships must be sensitive to the needs and motivation of teachers; this is basic to sound decision making and effective intervention. When people share a sense of purpose, work cooperatively, and have a supportive management system, performance and productivity are enhanced. Human skills contribute to goal attainment while enhancing the school as a human system.

While all skills in the mix are essential, technical skills, more than any others, make the role of the instructional supervisor unique. In all organizations, the closer one is to the work or production system (in education, to actual teaching), the more frequently technical skills are used. It is these skills that are addressed precisely to the teaching act and allow supervisors to intervene with targeted, helpful behavior. Supervisors need to work closely and continuously with teachers. It is essential that they possess specialized knowledge and skills, including the ability to demonstrate the skills they seek to develop in teachers. While teaching is a highly humanistic endeavor, the refinement of instruction requires supervisors who are both conceptually and technically strong.

By definition, a professional role is skill oriented. The skills should be sufficiently different, easily recognized, and clearly needed, so that the expertise of the professional role is valued and sought. The skills of a lawyer, a tax accountant, or an opthamologist cannot be found in the general populace. Similarly, within the school organization, the supervisory mix needs to be so well defined and demonstrated that there can be no question about the need for the role nor doubt of its effectiveness.□

[1]Dan C. Lortie, *Schoolteacher: A Sociological Study* (Chicago: The University of Chicago Press, 1977), p. 74.

[2]Robert J. Alfonso and Lee F. Goldsberry, "Colleagueship in Supervision," in *Supervision of Teaching*, ed. Thomas J. Sergiovanni (Alexandria, Va.: Association for Supervision and Curriculum Development, 1982), pp. 90–107.

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[5]Robert L. Katz, "The Skills of an Effective Administrator," *Harvard Business Review* 33 (1955): 33–42.

[6]Floyd C. Mann, "Toward an Understanding of the Leadership Role in Formal Organizations," in Dubin, *Leadership and Productivity* (San Francisco: Chandler Publishing Co., 1965), pp. 68–103.

[7]A comprehensive list and discussion of human, managerial, and technical skills may be found in Robert J. Alfonso, Gerald R. Firth, and Richard F. Neville, *Instructional Supervision: A Behavior System*, 2nd ed. (Boston: Allyn and Bacon, 1981), p. 334.

[8]Ibid., p. 357.

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Synthesis of Research on the Principal as Instructional Leader

Wynn De Bevoise

The quest for a clearer understanding of what makes certain principals more effective than others has spanned several decades. Many able researchers have already traced the evolution of this inquiry (Greenfield, 1982; Rutherford, Hord, and Huling, 1983). Even more scholars have attempted to synthesize or categorize the findings of studies that examine principals' traits, behaviors, styles, and contexts (Persell, with Cookson and Lyons, 1981; Bossert, Rowan, Dwyer, and Lee, 1981; Greenfield, 1982; Blumberg and Greenfield, 1980). This review adds to the literature on the principal's role as instructional leader and evaluates what we know, what we don't know, and what we need to know about the role.

We broadly interpret the concept of instructional leadership to encompass those actions that a principal takes, or delegates to others, to promote growth in student learning. Generally such actions focus on setting schoolwide goals, defining the purpose of schooling, providing the resources needed for learning to occur, supervising and evaluating teachers, coordinating staff development programs, and creating collegial relationships with and among teachers.

Instructional leadership is a somewhat new term in the literature on effective principals. In the 1960s and early 1970s, researchers concentrated on demographic characteristics of principals, such as race, age, physical appearance and size, sex, formal education, aspirations, and years of teaching experience. These studies yielded little information about how principals exercise leadership generally, or affect the instructional process. Ultimately, personal traits were shown to be unreliable predictors of leadership effectiveness (Rutherford, Hord, and Huling, 1983, pp. 10, 16).

The Principal-as-Person

After enduring a period of disfavor, studies of principals' personal characteristics have recently resurfaced with a new slant. Three studies from the 1980s examine the principal-as-person in terms of leadership styles and capacity for personal interaction. Little, if any, attention is given to the traits mentioned above. The first of these studies (Blumberg and Greenfield, 1980) consists of case studies of eight principals identified as effective by their colleagues and university faculty members. The principals were carefully selected to reflect diverse environments at the elementary and secondary levels and to include the experiences of both male and female administrators.

In their analysis of the eight case studies, Blumberg and Greenfield conclude that

> . . . most people can learn the necessary attitudes and skills that enable a group of people to function adequately. And it seems to be true that groups can learn to accept influence from a variety of people and to assign group functions accordingly. What seems not to be true, is that *anyone* can assume the role of leading an organization—a school—in the direction of making itself better than it is. Other things besides democratic functioning have to occur and the suggestion here is that these other things start with the character of the person involved (p. 245).

"We broadly interpret the concept of instructional leadership to encompass those actions that a principal takes, or delegates to others, to promote growth in student learning."

Among the characteristics of instructional leaders that Blumberg and Greenfield observed in their sample (inferred primarily from talks with the principals) are:

- A propensity to set clear goals and to have these goals serve as a continuous source of motivation
- A high degree of self-confidence and openness to others
- A tolerance for ambiguity

Wynn De Bevoise is Coordinator of Communications, Center for Educational Policy and Management, University of Oregon, Eugene. *The author wishes to thank Kenneth Duckworth and Richard O. Carlson for their generous help in preparing this article.*

- A tendency to test the limits of interpersonal and organizational systems
- A sensitivity to the dynamics of power
- An analytic perspective
- The ability to be in charge of their jobs.

The value of Blumberg and Greenfield's work lies not so much in the generation of yet another list of characteristics of effective principals. (It is not, after all, an easy matter to translate such a list into a program for professional development, nor are these characteristics easily discerned in the process of hiring a new principal.) Rather, the work is significant for its descriptions of the principals and their own assessments of how they operate in their schools. The eight subjects of the study reveal eight different styles of leadership and a look at the ways in which individual leaders adapt to and manipulate environments that are equally idiosyncratic.

One salient point that Blumberg and Greenfield repeatedly make is that the principals they observed were not willing to simply "keep the peace" and maintain a smooth-running organization. To some degree, all were *innovators*, constantly seeking ways to effect school improvement with an emphasis on student learning.

Another study, commissioned by the Florida State Department of Education (Huff, Lake, and Schaalman, 1982), set out to identify the competencies that characterize outstanding elementary and secondary principals—the "water walkers"—in the state. A critical-incidents study focusing on high and low points in the principals' experiences, the Florida report seeks to "uncover the thoughts underlying observed behavior . . . and distinguish between average (or acceptable) and outstanding performance."

The sample for this investigation was selected by identifying "outlier" districts with achievement scores that exceeded expectations (a predicted achievement level based on variables beyond the control of the school—college education of parents, total of minority students, poverty index, number of Hispanics in each grade, and occupation of parents). Within each of the outlier districts the superintendent was asked to rank the top 10 percent of both principals and schools. The researchers selected their group of exemplary principals

"The principals Blumberg and Greenfield observed were not willing to simply 'keep the peace' . . . to some degree, all were *innovators.*"

from the list of high-performing schools whose principals had served for at least three years and were also ranked as high-performing administrators by their superintendents. The control group of average principals was selected according to student performance on the state-

wide assessment tests. These students performed at or close to the statewide average, their schools were not highly ranked by superintendents, and they did not place in the top 10 percent on national tests. In addition, to independently validate the selection process, interviewers who were uninformed about the principals' performance randomly met with and ranked the administrators in both groups as high or average performers.

After evaluating the data gathered from the 31 principals involved in the project, Huff and her colleagues compiled a list of 14 competencies (six basic and eight optimal). Their findings complement those of Blumberg and Greenfield. Beyond the basic competencies, the effective principal has a clear sense of mission and control, tests the limits in providing needed resources, is persuasive and committed to high standards, uses a participatory style, and is not content to maintain the status quo.

Since there was no systematic basis for selection of the eight principals in Blumberg and Greenfield's study, it is reassuring to have their conclusions reinforced by the Florida investigation, which employed a somewhat elaborate method of sample selection. Where Blumberg and Greenfield's investigation was nonaggregative, and therefore illuminating on an individual basis, Huff and her associates used statistical analysis of the frequency of specific behaviors to identify those competencies that are *basic* (shared equally by members of both groups), and those that are *optimal* (yielding a model that is potentially generalizable and useful in performance appraisal and training).

A third study by Persell and others (1982) provides a summary of "recurrent themes" in the literature on effective principals. Those that touch on the principal's role as instructional leader reiterate the statements of Blumberg and Greenfield, and Huff and associates. Persell then raises the question of whether "all principals can be equally effective instructional leaders. Are there certain personal traits, skills, knowledge, or interpersonal styles that principals need in order to be effective instructional leaders?"

The literature asserts that effective principals are forceful, energetic, and goal-directed (Egerton, 1977; Hall and others, 1980, p. 24). Persell and her associates remain unconvinced, however, that energetic or dictatorial principals always engender positive consequences. Theodore Sizer (1983), who directed a structured survey in over 100 high schools across the country, recently remarked, "It is hard for teachers to carry a school with a weak principal, but a strong principal doesn't make a good school." The literature at present does not tell us the conditions under which forceful personalities contribute to increased effectiveness or vice versa.

Concerning self-confidence, openness to new ideas, tolerance for ambiguity, and other traits, Persell asks how these traits were measured and finds a lack of correlation with specified outcomes. Another important question is whether principals who display few of these traits perform badly. These questions reveal the significant weaknesses in research on the principal-as-person: (1) principals' characteristics and behaviors are difficult to measure and to correlate with the desired outcomes of schooling; (2) there have been no studies of ineffective principals to compare to those of effective principals; and (3) most prescriptions for desirable characteristics do not consider context or situational factors. Explaining effective leadership and its effect on student outcomes without addressing these weaknesses is akin to explaining the outcome of the Battle of Waterloo by noting Wellington's general characteristics and describing his typical mode of action.

Perhaps the important lesson to be learned from an examination of the characteristics of effective principals relevant to instructional leadership is the diversity of styles that appear to work. Rather than seeking a prescription for principal behavior, research needs to clarify how different styles and personalities interact with specific contexts to produce either desirable or undesirable consequences. We have seen what

works in one context, at one time, but we have yet to examine longitudinally what happens when leadership in one school changes. The question remains: Does the principal have a measured effect on student achievement? If so, what are the characteristics and styles that contribute to this effect? And finally, can the same effect be replicated in other contexts?

Reflecting on his observations in high schools, Sizer commented:

> What works in A may not work in B. There are a variety of styles that can be effective; it's the match that's important. I observed one large high school in which the principal behaved somewhat like a Muslim imam. His doors were always open and he held court throughout the day, dispensing justice and wisdom. No one was denied entry. Well, this school turned out to be an extraordinary school and it was his almost mythical stature that held everything together. He would not have been able to survive, I suspect, in a small, conservative community.

Meeting the School's Leadership Needs

Since the uniqueness of each principal's situation makes generalizations about personal characteristics and leadership styles difficult, some researchers have focused on the common leadership functions that must be satisfied in schools rather than on the person of the principal. Some studies suggest the possibility that many principals do not exercise instructional leadership, that such leadership is, in fact, supplied by other members of the organization.

Lortie (1982) describes the principal's role as residual, consisting of what no one else is assigned to do. He states that the leadership role of the principal has never been positively defined. Rather, it has evolved over the years as an accumulation of tasks that teachers were either unable or unwilling to perform. If the concept of instructional leadership is to be taken seriously, the residual role must be defined. To accomplish this, research needs to move beyond an examination of how a principal behaves to an understanding of what the principal can do to facilitate the job of teaching and encourage student learning. In addition, it is important to know what functions are essential in diverse contexts.

In an attempt to elaborate on how principals contribute to effective instruction, Duckworth and Carnine (1983) have written of the importance of providing consistent standards and expectations for teachers. Despite the need and desire for autonomy, "teachers need the backbone of organizational policy to sustain their efforts . . . with new strategies." According to Duckworth (1983) staff meetings, staff development activities, and observation of and consultation with individual teachers provide opportunities for the principal to encourage and recognize good work and show determination to remedy slack teaching. These events require direct action, although context, interpersonal relations, and the principal's leadership style will dictate how such action is accomplished.

Bossert and others (1981) and Dwyer and others (1983) have developed a framework for examining instructional management in schools that considers context as well as personal characteristics and functions. They argue that personal, district, and community characteristics influence a principal's management behavior, which affects the school's climate and the organization of instruction. These factors in turn affect student outcomes.

Through observations of five principals, Dwyer and others have contributed an appreciation of the interplay of personal styles, contextual factors, and organizational functions in managing an effective school. Like Sizer, they recognize the importance of matching job requirements, personality, and experience in principal selection.

The five principals described in Dwyer and others' case studies were recommended on the basis of reputation within their districts. The participants varied by race, sex, experience, and school and district characteristics. The initial in-depth interviews revealed that the principals felt their personal traits, experience, training, and beliefs influenced the nature of activities. Subsequent observations confirmed this view.

Dwyer and others found that the community had a dramatic impact on the work of each principal observed. One principal commented that 60 percent of his job entailed responses to situations originating in his community. The communities were perceived as providing both constraints and opportunities for the principals.

Highlights from Research on the Principal as Instructional Leader

- **Principals cannot exercise instructional leadership in a vacuum. They need support from teachers, students, parents, and the community.**
- **Common leadership functions that must be fulfilled in all schools including communicating the purpose of the school, monitoring performance, rewarding good work, and providing staff development. Whether or not these functions must be carried out by the principal depends upon the make-up of the teaching staff and the organization of the school district.**
- **While previous studies have generally concentrated on only one facet of instructional leadership—such as personal traits, leadership styles, management behaviors, or organizational contexts—current studies tend to address the interrelationships between these factors.**
- **The personal characteristics of the principal cannot be ignored when studying what constitutes effective instructional leadership. However, studies of personal characteristics and leadership styles are of limited use out of context.**
- **The desirable characteristics of effective principals have not been convincingly correlated with student achievement.**

The institutional contexts circumscribing these principals contributed significantly to the way they chose to approach instructional matters.

> The two principals who appeared to be least obtrusive in instructional matters in their schools . . . led faculties composed of 10-year or more veterans of the public school classroom. The more direct interventionist principals led less mature faculties of faculties in which more turnover occurred. Successfully leading stable, experienced teachers, then, may require a distinctly different strategy from leading relatively new or inexperienced teachers (Dwyer and others, 1983, pp. 52–53).

Despite a high degree of individual variation among the principals, Dwyer and others found some fundamental functions shared by all who have an important influence on instruction—hiring staff and providing training for those already on the staff, monitoring, exchanging and controlling information, planning, and interacting directly with students. In fact, many of the principal's essential activities are of a routine nature. The principals in their study participated in daily cycles that helped them assess their schools' working order and the progress being made toward long-term goals.

> We speculate that the effects of these routine acts on the quality of instruction and student experiences in schools can be substantial. As such, this developing perspective on instructional leadership provides the overworked, out-of-time practitioner with a manageable alternative form. . . . These are the common acts of the principalship. They require no new program, no innovation, no extensive change. The success of these activities for instructional management hinges, instead, on the principal's capacity to connect them to the instructional system (Dwyer and others, 1983, p. 54).

Gersten and Carnine (1981) have identified six administrative and supervisory support functions that they consider essential to instructional improvement. They do not believe, however, that these functions need necessarily be carried out by the principal. Their work with Follow Through in inner-city schools has revealed that the principal may not play a central role in increasing the instructional effectiveness of schools. They argue that most principals either are not trained to be instructional leaders or have too many other demands placed on their time. What principals can do is ensure that someone in the organization fulfills the following support functions:

- Implement programs of known effectiveness or active involvement in curricular improvement
- Monitor student performance
- Monitor teacher performance
- Provide concrete technical assistance to teachers (inservice programs, coaching)
- Demonstrate visible commitment to programs for instructional improvement
- Provide emotional support and incentives for teachers.

Gersten and Carnine's concept of support functions suggests the practicality of using a team approach. Just such a pattern was discerned in the case studies conducted by Blumberg and Greenfield and by Bossert and others, although the degree to which a team is used varies widely, depending on the principal's leadership style. Typically, members of such a team could include a vice principal, a resource teacher, a department head, a facilitator, or a curriculum specialist from the district office (Hord, Hall, and Stiegelbauer, 1983).

While Gersten and Carnine do not reserve a particular role for the principal as instructional leader, Hall and others (1982) argue that certain functions in an implementation effort must be accomplished by the principal. Those principals who exercise greater instructional leadership rely less on a second "change facilitator" than those who tend to maintain the status quo, but even the latter must show commitment to an innovation if it is to be adopted. Judith Little (1983), who has examined collegial relationships between administrators and teachers in providing norms for continuous improvement, perceives an advantage to sharing the leadership role in a change effort.

> We're increasingly coming to speculate that the question of instructional leadership or facilitation of change is not just the province of a single role in the school, although the principal has some rights of initiative that others do not have . . . I would speculate that the more broadly they are distributed to two, three, and four change facilitators, you may have the greater prospects for continuation of a particular set of practices (Hall and others, 1983, p. 180).

Despite disagreement about who should perform the functions of educational leadership, there is agreement about what those functions are. Researchers' lists (Bossert and Dwyer and others, Duckworth, and Gersten and Carnine) all include communicating a vision of the school's purposes and standards, monitoring student and teacher performance, recognizing and rewarding good work, and providing effective staff development programs.

Two problems remain with the generation of this abbreviated list: (1) these functions are ideal, and (2) they do not reflect what most principals do or feel they can do. Moreover, the agreed-upon functions have not been correlated with any criteria reflecting the outcomes of schooling, such as student achievement, absenteeism, staff morale, or organizational climate. Measurement of these variables and correlation with administrative behavior are still fraught with difficulties.

A Shared Responsibility

Obviously many questions remain unanswered and await further investigation as well as refinements in research methodology. What, then, has research contributed in recent years to the quest for a more substantive understanding of the principal's capacity for exercising leadership?

First, examinations guided by separate theories of leadership based on personal characteristics, leadership styles, situational factors, and management behaviors have yielded a body of knowledge that now informs a more integrated approach to the topic. It is clear that principals do not act in isolation, that there are, as Dwyer and others maintain, myriad factors, both external and internal, affecting their work and behavior.

Second, past failures to adequately explain effective leadership in schools or to identify "rules" of instructional leadership have spawned a healthy skepticism concerning the application of antiseptic theories to schools teeming with real people using a language totally foreign to the theorist. The language in the case studies reviewed here generally bears a close resemblance to the language of principals and teachers.

Third, recent research on the principal emphasizes the variation possible in providing instructional leadership. Beyond lists of desirable characteristics and essential functions, there is a growing awareness of the complexity and uniqueness of each principal's situation, which dictates an idiosyncratic blend of the desirable and the possible.

Research should help principals evaluate their own strengths and weaknesses and the constraints and opportunities posed by their environments. With an understanding of these factors, principals can look for ways to ensure that others on the staff or in the community provide resources complementary to their own.

Ultimately, the provision of instructional leadership can be viewed as a responsibility that is shared by a community of people both within and outside the school. Principals initiate, encourage, and facilitate the accomplishment of instructional improvement according to their own abilities, styles, and contextual circumstances. They still need a lot of help from others if improvement is to become the norm. □

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Leadership and Excellence in Schooling

Excellent schools need freedom within boundaries.

THOMAS J. SERGIOVANNI

It is in and through symbols that man, consciously or unconsciously, lives, works and has his meaning.
—Thomas Carlyle

Is your school a good school? When Joan Lipsitz posed this question to principals of the excellent middle schools she studied, she found that they had difficulty defining what made their schools special or what the dimensions of excellence in schooling were. "You will have to come and see my school," was the typical response.[1]

Thomas J. Sergiovanni is Professor and Chairperson, Department of Administration, Higher and Continuing Education, University of Illinois, Urbana-Champaign. *This article is based on The Lillian Radford Lecture, "The Forces of Leadership," given at Trinity University, San Antonio, Texas, November 14, 1983.*

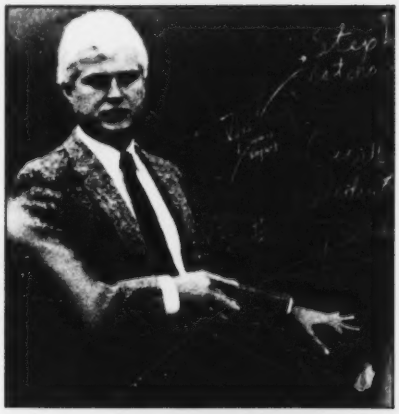
Excellence is readily recognized in our ordinary experiences. It is difficult to put our finger on what makes a particular athletic or artistic performance excellent. But we know excellence when we see it. The earmarks of an excellent piano performance may be found not in the notes played but in the pauses between them. Clearly, excellence is multidimensional, holistic.

Competence, by contrast, is marked by mastery of certain predetermined, essential fundamentals. The piano student achieves mastery and thus is able to play the notes flawlessly and deliver a performance recognized as technically competent.

Similarly, we know excellent schools when we experience them, despite difficulties in definition. In excellent schools things "hang together"; a sense of purpose rallies people to a common cause; work has meaning and life is significant; teachers and students work together and with spirit; and accomplishments are readily recognized. To say excellent schools have high morale or have students who achieve high test scores or are schools that send more students to college misses the point. Excellence is all of these and more.

Excellence, Not Competence

Should we expect more from our schools than the satisfaction of knowing they're performing "up to standard" and that students are competent performers? Most surveys indicate that basic skill learning and developing fundamental academic competence—the indicators of effectiveness common to the school effectiveness literature—are paramount goals in the minds of most parents and teachers. But, pushed a bit further, parents and teachers provide a more expansive view of excellence, which includes developing a love of learning, critical thinking and problem-solving



skills, aesthetic appreciation, curiosity and creativity, interpersonal competence, and so on. Parents want a complete education for their children. Indeed our society requires it. Our young need to become cultured, educated citizens able to participate fully in society, not just trained workers with limited potential for such participation.

Important differences exist among incompetent, competent, and excellent schools and their leaders. Schools managed by incompetent leaders simply don't get the job done. Typically, such schools are characterized by confusion and inefficiency in operation and malaise in human climate. Student achievement is lower in such schools. Teachers may not be giving a fair day's work for a fair day's pay. Student absenteeism, discipline, and violence may be a problem. Conflict may characterize interpersonal relationships among faculty or between faculty and supervisors. Parents may feel isolated from the school. Competent schools, by contrast, measure up to these and other standards of effectiveness. They get the job done in a satisfactory manner. Excellent schools, however, exceed the expectations necessary to be considered satisfactory. Students in such schools accomplish far more and teachers work much harder than can ordinarily be expected.

Leadership Forces and Excellence

Leadership has several aspects, each of which contributes uniquely to school competence and to school excellence. The current focus in leadership theory and practice provides a limited view, dwelling excessively on some aspects of leadership to the virtual exclusion of others. Unfortunately, these neglected aspects of leadership are linked to excellence—a revelation now unfolding from recent research on school effectiveness and school excellence.

Aspects of leadership can be described metaphorically as forces available to administrators, supervisors, and teachers as they influence the events of schooling. Force is the strength or energy brought to bear on a situation to start or stop motion or change. Leadership forces can be thought of as the means available to administrators, supervisors, and teachers to bring about or preserve changes needed to improve schooling.

At least five leadership forces can be identified:

- *Technical*—derived from sound management techniques
- *Human*—derived from harnessing available social and interpersonal resources
- *Educational*—derived from expert knowledge about matters of education and schooling
- *Symbolic*—derived from focusing the attention of others on matters of importance to the school
- *Cultural*—derived from building a unique school culture.

The first two forces have dominated the leadership literature in recent years and loom large in training programs offered through ASCD's National Curriculum Study Institutes.

1. *The technical leader assumes the role of "management engineer."* By emphasizing such concepts as planning and time management technologies, contingency leadership theories, and organizational structures, the leader provides planning, organizing, coordinating, and scheduling to the life of the school. An accomplished management engineer is skilled at manipulating strategies and situations to ensure optimum effectiveness.

2. *The human leader assumes the role of "human engineer."* By emphasizing such concepts as human relations, interpersonal competence, and instrumental motivational technologies, she or he provides support, encouragement, and growth opportunities to the school's human organization. The skilled engineer is adept at building and maintaining morale and using such processes as participatory decision making.

3. *The educational leader assumes the role of "clinical practitioner," bringing expert professional knowledge and bearing as they relate to teaching effectiveness, educational program development, and clinical supervision.* The clinical practitioner is adept at diagnosing educational problems; counseling teachers; providing for supervision, evaluation, and staff development; and developing curriculum. One wonders how such essential concerns of *school* leadership

could, for so long, have been neglected in the literature of educational administration.

In an earlier era the *educational* aspects of leadership were center stage in the literature of educational administration and supervision. Principals were considered to be instructional leaders, and an emphasis on schooling characterized university training programs. However, advances of management and social science theory in educational administration and supervision soon brought to center stage technical and human aspects. John Goodlad has been a persistent critic of the displacement of educational aspects of leadership in favor of technical and human. He argues, "But to put these matters at the center, often for understandable reasons of survival and expediency, is to commit a fundamental error which ultimately will have a negative impact on both education and one's own career. *Our work, for which we will be held acccountable, is to maintain, justify, and articulate sound, comprehensive programs of instruction for children and youth.*"[2]

He states further, "It is now time to put the right things at the center again. And the right things have to do with assuring comprehensive, quality educational programs in each and every school under our jurisdiction."[3]

The technical, human, and educational forces of leadership, brought together in an effort to maintain or improve schooling, provide the critical mass needed for *competent* schooling. A deficit in any one of the three upsets this critical mass, and less effective schooling is likely to occur. Recent studies of excellence in organizations suggest that despite the link between these three aspects of leadership and competence in schooling, their presence does not guarantee excellence. Excellent organizations, schools among them, are characterized by other leadership qualities; forces described here as *symbolic* and *cultural*.

4. *The symbolic leader assumes the role of "chief" and by emphasizing selective attention (the modeling of important goals and behaviors) signals to others what is of importance and value.* Touring the school; visiting classrooms; seeking out and visibly spending time with students; downplaying management concerns in favor of educational ones; presiding over ceremonies, rituals, and other important occasions; and providing a unified vision of the school through proper use of words and actions are examples of leader activities associated with this fourth force.

Purposing is of major concern to the symbolic force. Peter Vaill defines purposing as "that continuous stream of actions by an organization's formal leadership which has the effect of inducing clarity, consensus, and commitment regarding the organization's basic purposes."[4] Students and teachers alike want to know what is of value to the school and its leadership; desire a sense of order and direction; and enjoy sharing this sense with others. They respond to these conditions with increased work motivation and commitment.

Of less concern to the symbolic force is the leader's behavioral style. Instead, what the leader stands for and communicates to others is emphasized. The object of symbolic leadership is the stirring of human consciousness, the integration and enhancing of meaning, the articulation of key cultural strands that

"Important differences exist among incompetent, competent, and excellent schools. . . . Students in excellent schools accomplish far more and teachers work much harder than can ordinarily be expected."

identify the substance of a school, and the linking of persons involved in the school's activities to them. As Lou Pondy suggests "What kind of insights can we get if we say that the effectiveness of a leader lies in his ability to make activity meaningful for those in his role set—not to change behavior but to give others a sense of understanding what they are doing, and especially to articulate it so they can communicate about the meaning of their behavior?"[5] Providing meaning and rallying people to a common cause constitute effectiveness in symbolic leadership.

Leaders typically express symbolic aspects of leadership by working beneath the surface of events and activities and searching for deeper meaning and value. As Robert J. Starratt suggests, leaders seek to identify the roots of meaning and the flow and ebb of daily life in schools so that they might provide students, teachers, and members of the community with a sense of importance, vision, and purpose about the seemingly ordinary and mundane. Indeed, these leaders bring to the school a sense of drama in human life that permits persons to rise above the daily routine. They are able to see the significance of what a group is doing, and indeed *could* be doing. They have a feel for the dramatic possibilities inherent in most situations and are able to urge people to go beyond the routine, to break out of the mold into something more lively and vibrant. And finally, symbolic leaders are able to communicate their sense of vision by words and examples. They use easily understood language symbols, which communicate a sense of excitement, originality, and freshness. These efforts provide opportunities for others in the school to experience this vision and to obtain a sense of purpose so that they might come to share in the ownership of the school enterprise more fully.[6]

Warren Bennis argues that a compelling vision is the key ingredient of leadership in the excellent organizations he studied. Vision refers to the capacity to create and communicate a view of a desired state of affairs that induces commitment among those working in the organization.[7] Vision, then, becomes

the substance of what is communicated as symbolic aspects of leadership are emphasized.

5. *The cultural leader assumes the role of "high priest," seeking to define, strengthen, and articulate those enduring values, beliefs, and cultural strands that give the school its unique identity.* As high priest the leader is engaged in legacy building, and in creating, nurturing, and teaching an organizational saga,[8] which defines the school as a distinct entity within an identifiable culture. The words clan or tribe come to mind. Leader activities associated with the cultural force include articulating school purposes and mission; socializing new members to the culture; telling stories and maintaining or reinforcing myths, traditions, and beliefs; explaining "the way things operate around here"; developing and displaying a system of symbols over time; and rewarding those who reflect this culture.

The net effect of the cultural force of leadership is to bond together students, teachers, and others as believers in the work of the school. Indeed, the school and its purposes are somewhat revered as if they resembled an ideological system dedicated to a sacred mission. As persons become members of this strong and binding culture, they are provided with opportunities for enjoying a special sense of personal importance and significance. Their work and their lives take on a new importance, one characterized by richer meanings, an expanded sense of identity, and a feeling of belonging to something special—all highly motivating conditions.[9]

Before further pursuing the powerful forces of symbolic and cultural leadership, let's view the five forces in the form of a leadership hierarchy as depicted in Figure 1. The following assertions can be made about the relationships of these forces:

1. Technical and human leadership forces are generic and thus share identical qualities with competent management and leadership wherever they are expressed. They are not, therefore, unique to the school and its enterprise regardless of how important they may be.

2. Educational, symbolic, and cultural leadership forces are situational and contextual, deriving their unique qualities from specific matters of education and schooling. These qualities differentiate educational leadership, supervision, and administration from management and leadership in general.

3. Technical, human, and educational aspects of educational leadership forces are essential to competent schooling, and their absence contributes to ineffectiveness. The strength of their presence alone, however, is not sufficient to bring about excellence in schooling.

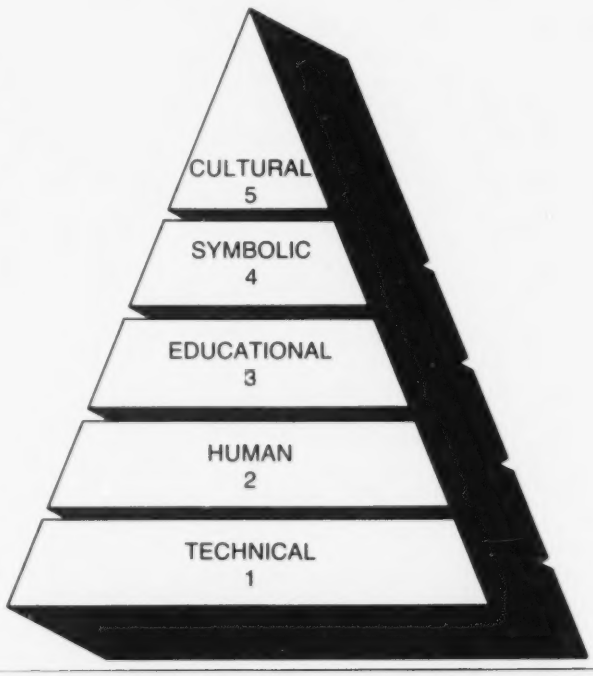
4. Cultural and symbolic aspects of substantive leadership forces are essential to excellence in schooling. Their absence, however, does not appear to negatively affect routine competence.

5. The greater the presence of a leadership force higher in the hierarchy, the less important (beyond some unknown minimum presence) are others below.

Culture and Purpose: Essentials of Excellence

Culture building and practicing the art of purposing are the essentials of symbolic and cultural leadership forces. Culture can be described as the collective programming of the mind that distinguishes the members of one school from another.[10] Cultural life in schools is constructed reality, and leaders play a key role in building this reality. School culture includes values, symbols, beliefs, and shared meanings of parents, students, teachers, and others conceived as a group or community. Culture governs what is of worth for this group and how members should think, feel, and behave. The "stuff" of culture includes a school's customs and traditions; historical accounts; stated and unstated understandings; habits, norms, and expectations; common meanings and shared assumptions. The more understood, accepted, and cohesive the culture of a school, the better able it is to move in concert toward ideals it holds and objectives it wishes to pursue.

Figure 1. The Leadership Forces Hierarchy



All schools have cultures: strong or weak, functional or dysfunctional. Successful schools seem to have strong and functional cultures aligned with a vision of excellence in schooling. This culture serves as a compass setting to steer people in a common direction; provides a set of norms that defines what people should accomplish and how; and provides a source of meaning and significance for teachers, students, administrators, and others as they work. Strong, functional cultures are domesticated in the sense that they emerge deliberately—they are nurtured and built by the school leadership and membership.

Weak cultures, by contrast, result in a malaise in schools characterized by a lack of understanding of what is to be accomplished and a lack of excitement for accomplishment itself. Sometimes cultures are strong *and* dysfunctional. In this case, students may have banded together to build a strong culture directed at disrupting the school or coercing other students to misbehave or perform poorly. Teachers, too, can be sources of problems in strong, dysfunctional cultures if they place their own interests first. In some schools, for example, an informal culture may exist with strong norms that dictate to faculty how they should behave. It might be unacceptable, for example, for teachers to take work home with them or to visit with students after school. Teachers who are working very hard might be considered as "eager beavers" or "rate busters," and as a result find themselves distanced from this culture. Cultures of this sort might be referred to as *wild*. Wild cultures are not in control of administrators, supervisors, parents, teachers, and students as a cohesive group. They develop more informally or willy-nilly. When a dysfunctional wild culture exists in a school, excellence requires the building of a new, strong culture.

Culture building requires school leaders to give more attention to the informal, subtle, and symbolic aspects of school life. Teachers, parents, and students need answers to some basic questions: What is the school about? What is important here? What do we believe in? Why do we function the way we do? How are we unique? How do I fit into the scheme of things? Answering such questions provides an orderliness to one's school life derived from a sense of purpose and enriched meanings.

"The task of leadership is to create the moral order that binds them . . . and the people around them," notes Thomas B. Greenfield.[11]

James Quinn states, "The role of the leader, then, is one of orchestrator and labeler: taking what can be gotten in the way of action and shaping it—generally after the fact—into lasting commitment to a new strategic direction. In short, he makes meanings."[12]

Leadership as culture building is not a new idea, but one solidly imbedded in our history and well known to successful school and other leaders. In 1957, Phillip Selznick wrote:

> The art of the creative leader is the art of institution building, the reworking of human and technological materials to fashion an organism that embodies new and enduring values. . . . To institutionalize is to *infuse with value* beyond the technical requirements of the task at hand. The prizing of social machinery beyond its technical role is largely a reflection of the unique way it fulfills personal or group needs. Whenever individuals become attached to an organization or a way of doing things as persons rather than as technicians, the result is a prizing of the device for its own sake. From the standpoint of the committed person, the organization is changed from an expendable tool into a valued source of personal satisfaction. . . . The institutional leader, then, is *primarily an expert in the promotion and protection of values*.[13]

And in 1938, the noted theorist, Chester Barnard, stated the following about executive functions:

> The essential functions are, first to provide the system of communications; second, to promote the securing of essential efforts; and third, to formulate and define purpose. . . . It has already been made clear that, strictly speaking, purpose is defined more nearly by the aggregate of action taken than by any formulation in words.[14]

Freedom with Restrictions

Excellent schools have central zones composed of values and beliefs that take on sacred or cultural characteristics. Indeed, it might be useful to think of them as having an official "religion," which gives meaning and guides appropriate actions. As repositories of values, these central zones become sources of identity for teachers and students, giving meaning to their school lives. The focus of leadership, then, is on developing and nurturing these central zone patterns so that they provide a normative basis for action within the school.

Mariam Flam, Principal, Oakland Terrace Elementary School, Montgomery County Schools, Maryland

In some respects, the concept of central zone suggests that effective schools are tightly structured. That is, they are organized in a highly disciplined fashion around a set of core ideas, which spell out the way of life in the school and govern behaviors. This is in contrast to recent developments in organizational theory which describe schools as being loosely structured entities. James G. March, a noted organizational theorist, speaks of educational organizations as being organized anarchies.[15] Similarly, Karl Weick uses the phrase loose coupling to describe the ways in which schools are organized.[16] Indeed Weick believes that one of the reasons for ineffectiveness in schooling is that schools are managed with the wrong theory in mind.

Figure 2. The Forces of Leadership and Excellence in Schooling

Force	Leadership Role Metaphor	Theoretical Constructs	Examples	Reactions	Link to Excellence
1. Technical	"Management engineer"	• Planning and time management technologies • Contingency leadership theories • Organizational structure	• Plan, organize, coordinate, and schedule • Manipulate strategies and situations to ensure optimum effectiveness	People are managed as objects of a mechanical system. They react to efficient management with indifference but have a low tolerance for inefficient management.	Presence is important to achieve and maintain routine school competence but not sufficient to achieve excellence. Absence results in school ineffectiveness and poor morale.
2. Human	"Human engineer"	• Human relation supervision • "Linking" motivation theories • Interpersonal competence • Conflict management • Group cohesiveness	• Provide needed support • Encourage growth and creativity • Build and maintain morale • Use participatory decision making	People achieve high satisfaction of their interpersonal needs. They like the leader and the school and respond with positive interpersonal behavior. A pleasant atmosphere exists that facilitates the work of the school.	
3. Educational	"Clinical practitioner"	• Professional knowledge and bearing • Teaching effectiveness • Educational program design • Clinical supervision	• Diagnose educational problems • Counsel teachers • Provide supervision and evaluation • Provide inservice • Develop curriculum	People respond positively to the strong expert power of the leader and are motivated to work. They appreciate the assistance and concern provided.	Presence is essential to routine competence. Strongly linked to, but still not sufficient for, excellence in schooling. Absence results in ineffectiveness.
4. Symbolic	"Chief"	• Selective attention • Purposing • Modeling	• Tour the school • Visit classrooms • Know students • Preside over ceremonies and rituals • Provide a unified vision	People learn what is of value to the leader and school, have a sense of order and direction and enjoy sharing that sense with others. They respond with increased motivation and commitment.	Presence is essential to excellence in schooling though absence does not appear to negatively impact routine competence.
5. Cultural	"High priest"	• Climate, clan, culture • Tightly structured values—loosely structured system • Ideology • "Bonding" motivation theory	• Articulate school purpose and mission • Socialize new members • Tell stories and maintain reinforcing myths • Explain SOPs • Define uniqueness • Develop and display a reinforcing symbol system • Reward those who reflect the culture	People become believers in the school as an ideological system. They are members of a strong culture that provides them with a sense of personal importance and significance and work meaningfulness, which is highly motivating.	

Contemporary thought, Weick argues, assumes that schools are characterized by four properties: the existence of a self-correcting rational system among people who work in a highly interdependent way; consensus on goals and the means to obtain these goals; coordination by the dissemination of information; and predictability of problems and responses to these problems. In fact, he notes, none of these properties are true characteristics of schools and how they function. Effective school administrators in loosely coupled schools, he observes, need to make full use of symbol management to tie together the system. In his words:

> People need to be part of sensible projects. Their action becomes richer, more confident, and more satisfying when it is linked with important underlying themes, values and movements. . . . administrators must be attentive to the 'glue' that holds loosely coupled systems together because such forms are just barely systems.[17]

Weick continues:

> The administrator who manages symbols does not just sit in his or her office mouthing clever slogans. Eloquence must be disseminated. And since channels are unpredictable, administrators must get out of the office and spend lots of time one on one—both to remind people of central visions and to assist them in applying these visions to their own activities. The administrator teaches people to interpret what they are doing in a common language.[18]

Recent observations about the school effectiveness literature point out that effective schools are not loosely coupled or structured at all but instead are tightly coupled.[19] My interpretation of the school effectiveness excellence literature leads me to believe that these schools are *both* tightly coupled and loosely coupled, an observation noted as well by Peters and Waterman in their studies of America's best-run cooperations. There exists in excellent schools a strong culture and clear sense of purpose, which defines the general thrust and nature of life for their inhabitants. At the same time, a great deal of freedom is given to teachers and others as to how these essential core values are to be honored and realized. This combination of tight structure around clear and explicit themes, which represent the core of the school's culture, and of autonomy for people to pursue these themes in ways that make sense to them, may well be a key reason for their success.

The combination of tight structure and loose structure corresponds very well to three important human characteristics associated with motivation: commitment, enthusiasm, and loyalty to school. Teachers, students, and other school staff need to:

1. Find their work and personal lives meaningful, purposeful, sensible, and significant
2. Have some reasonable control over their work activities and affairs and to be able to exert reasonable influence over work events and circumstances
3. Experience success, think of themselves as winners, and receive recognition for their success.

People are willing to make a significant investment of time, talent, and energy in exchange for enhancement and fulfillment of these three needs.[20]

Leadership Density

Figure 2 provides a summary of the relationship between the five forces of leadership and excellence in schooling. Included for each force are the dominant metaphor for leadership role and behavior; important theoretical constructs from which such behavior is derived; examples of the behaviors in school leadership; reactions of teachers and others to the articulation of leadership forces; and links of each force to school competence and excellence.

As leaders are able to better understand and incorporate each of the five forces, they must be prepared to accept some additional burdens. Symbolic and cultural forces are very powerful influences of human thought and behavior. People respond to these forces by bonding together into a highly normative-cohesive group, and this group in turn bonds itself to the school culture in an almost irrational way. The "cult" metaphor communicates well the nature and effect of extremely strong bonding. How strong is the bonding of excellent schools? Is it possible that there are limits beyond which bonding works against excellence? As bonding grows, one is apt to "think" less and "feel" more about work and commitments to school.

No easy answer exists to this problem. But the burdens of leadership will be less if leadership functions and roles are shared and if the concept of *leadership density* were to emerge as a viable replacement for principal leadership. The moral and ethical foundation for leadership will be strengthened if leaders place outer world concerns (such as the welfare of schooling) before inner concerns for self-expression and personal success. Leaders might select as their slogan Kant's admonition, "Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only."□

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Topic B

Organization for Supervisory Services

SUPERVISION OF THE INSTRUCTIONAL PROGRAM IS A FUNCTION that may be performed by various persons at different levels in a school organization. That service may be provided by general and special supervisors working out of the central office. Their efforts may be supplemented by professionals external to the school system, such as consultants for regional educational service agencies who work cooperatively with the district. At the local school level, support for the instructional program may be provided by the principal, lead teacher, grade level chairpersons, department chairpersons, peer teachers, or leadership teams that include teachers.

How districts organize for supervision, as well as what part of their resources they allocate to supervision, affects supervisory effectiveness. Reductions in the funds for supervisory positions at the central office level and the recent recognition of the importance of providing supervisory support directly to teachers at the building level have caused districts to reevaluate central office supervision and look for additional options. Appointing for each school a "lead teacher" who can be housed there and assigned full-time responsibility for providing supervision of instruction is one example of an attempt to make supervisory support readily available to teachers.

Costa and Guditus respond to some of these concerns in "Do Districtwide Supervisors Make a Difference?" They report the work of an ASCD Task Force charged with generating data on the roles, functions, and impact of districtwide supervisory personnel. They call attention to the loneliness and rewards experienced by districtwide supervisors, and they raise a number of important questions they feel need to be answered. Students of supervision as well as practitioners will want to follow the work of the Task Force and its report.

"Improving Instruction Through Focused Team Instruction" presents an organizational approach championed by Bickel and Artz. They contrast focused team supervision with traditional supervision, give an example of focused team supervision in Pittsburgh's School Improvement Program (SIP), and conclude that the team approach "lets supervisors zero in on priority areas and strengthens their relationships with teachers." Practitioners may want to reflect upon this article and determine whether it has implications for reorganization for the delivery of supervisory services in their own districts.

Glatthorn and Newberg advocate "A Team Approach to Instructional Leadership," which focuses on functions, not roles, and makes effective use of the talents of staff members. They build a case for the use of the team approach at the secondary school level and specifically describe a process for implementation. Those who are intrigued by the concept of team management will find this article very practical.

Alfonso and Goldsberry, in "Colleagueship in Supervision," discuss the growing recognition within the profession of the value of—and arrangements for—teachers helping teachers as a vehicle for the improvement of instruction. As used by these writers, the expression "colleagueship in supervision" includes the widely used term "peer supervision." Their article reviews the efforts for and champions the cause of assisting teachers to assume "greater responsibility for improving their own instruction and the instruction of their colleagues."

As readers direct their attention to the articles, the following questions and activities may stimulate reaction and discussion.

1. Costa and Guditus raise four questions for which the Task Force is seeking answers. Consider the status of the districtwide supervisory program in your district (or another that you choose) and respond to each of the four questions.

2. What do you see as the strengths and limitations of the focused team approach to instructional supervision which Bickel and Artz describe?

3. Using the implementation process described by Glatthorn and Newberg, develop a plan of action to implement the team approach to instructional leadership in your local school (or another that you choose). Describe in detail what steps would need to be taken and by whom in each of their identified four key stages—diagnose, allocate, implement, and evaluate.

4. Identify both the advantages of and the barriers to colleagueship in supervision as presented by Alfonso and Goldsberry. Then describe the specific steps you would take to implement the concept of colleagueship in supervision in your school.

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Do Districtwide Supervisors Make a Difference?

ARTHUR COSTA AND CHARLES GUDITUS

An ASCD Task Force is encouraging research and study in an effort to find out—and to inform school boards and administrators.

During the last decade the number of districtwide instructional supervisors has slowly but steadily declined. Declining enrollments undoubtedly have had a great deal to do with this trend. However, the loss of positions also suggests that a lower priority is being given to districtwide curriculum and instructional leadership. Ironically, this lower priority seems to be inconsistent with mounting demands for increased educational effectiveness.

ASCD is concerned about this development and is seeking to focus attention on the roles, functions, and impact of districtwide supervisory personnel. In October 1982 the ASCD Executive Council appointed a Task Force to study this situation and to generate data that would document supervisory staffing patterns, the effects of different supervisory approaches on education, and the implications of these findings for the development of more effective schools.

First, the Task Force surveyed the data already available. This included a search of ERIC data, solicitation of input from each state's chief school official, and inquiries to several educational research and development laboratories. This effort revealed that objective data on the role and importance of districtwide supervisors are largely unavailable. However, these efforts enabled the committee to formulate some specific questions and hunches to serve as the focus for new research about districtwide supervisors.

Arthur Costa is Professor of Education, California State University, Sacramento; and Charles Guditus is Coordinator of Administration and Supervision Programs, Lehigh University, Bethlehem, Pennsylvania.

The Task Force hopes that these impressions will serve to encourage others to become involved in the project by sharing any experiences, knowledge, and research data that might more clearly establish the role and importance of districtwide supervisors.

Supervisors: A neglected, forgotten, lonely group. The committee's initial investigation yielded no documented evidence that supervisors do make a difference. More startling, however, is the discovery that there is no system in effect for collecting data about effectiveness and influence of supervisors. Their roles, expectancies, and job descriptions are often vague. They are expected to play a low-key role and to make others—teachers and administrators—"look good." Thus, they receive little credit for or feedback about their accomplishments. Because central office supervisors' job descriptions are poorly defined and their role misunderstood, teachers often form negative concepts about their usefulness. Supervisors' time and energies are often used, and sometimes abused, by district administrators. Superintendents ask them to deal with tedious paperwork, to generate data to justify and support central office causes, and to help maintain their positive image in the view of the board and the public. Principals often use them to evaluate and assist in dismissing incompetent teachers. These circumstances tend to interfere with the helping relationship needed to work productively with other staff members.

Supervisors' jobs are constantly in jeopardy at the bargaining table, but they seldom have an advocate during the negotiating process. When claims are made that there are "too many administrators up in the central office," the "excess" supervisory personnel are usually the first to go.

Why would anybody want to be one? In spite of the ambiguity, delayed grati-

fication, and job insecurity, there are certain joys in being a supervisor. The position is often sought by "upwardly mobile" educators, who use it temporarily as a stepping stone to a position of higher authority and influence. More often, however, the position is valued by "consultative types," who find stimulation in working with teachers to improve student learning and who value the autonomy of setting their own schedules and the freedom of pursuing their own interests. They thrive on self-improvement and professional growth opportunities that come with working on "cutting edge" developments in educational organizations and in working with other personnel in similar curriculum and instruction positions.

Who are they? The labels given to people who perform curriculum and supervisory functions are varied. They seem to fall into two broad categories: line and staff. Some typical *line* titles are:

Assistant Superintendent for Instructional Programs
Assistant Superintendent in Charge of Curriculum
Director of Curriculum
Director of Instructional Services
Director of Instructional Materials
Director of (Elementary) (Secondary) Programs

Some typical *staff* titles are:

Supervisor
Coordinator
Consultant
Director of Categorical Programs (Gifted, Special Education, Migrant, and so on)
Resource Teacher
Specialist
Staff Developer
Subject Matter Specialist

More questions than answers: a needed research agenda. To accomplish their assignment, the Task Force is in need of answers to, and means of collecting data on such questions as:

1. What are curriculum and instructional supervisory functions?
2. How are school districts organized to perform these functions?
3. What are the consequences for curriculum and instructional effectiveness when these functions are not performed or are shifted to others?
4. Historically, what have been the role and contributions of central office supervisory personnel? Compared with the present, how have the job descriptions and staffing patterns of supervisory personnel changed over the past five to ten years?

To answer these questions, the Task Force is pursuing some research and hopes to encourage others to conduct more. Reviews of research on central office supervisor roles, staffing patterns, and effectiveness need to be located and synthesized. Surveys of selected school districts representing various sizes and geographic distribution need to be performed. To determine how supervisory functions have changed, comparisons need to be made between how districts were organized five to ten years ago and how they are presently organized. Studies need to be performed of how supervisory systems operate. Superintendents, principals, and teachers should be asked to describe their most influential supervisory experiences and to identify the qualities and characteristics of the most effective supervisors. The effects on schoolwide curriculum and instruction in those districts that have lost their supervisory/consultant staff need to be determined. "Effective" vs. "ineffective" schools and school systems need to be compared in relationship to supervisory effectiveness and staffing patterns.

To stimulate this needed research, the Task Force is allocating some of its funds for mini-grants to encourage doctoral students and others to pursue these questions. The committee is developing proposals for funding from other foundations and agencies and will be offering honoraria to conduct case studies and analyses. Interested ASCD members who wish to find out more information about involvement in this project may contact the committee chairman: Robert H. Anderson, c/o the ASCD headquarters office, 225 N. Washington St., Alexandria, VA 22314, or any of the committee members: Arthur Blumberg, Syracuse University, New York; Arthur Costa, California State University, Sacramento; Carl Glickman, University of Georgia, Athens; Charles Guditus, Lehigh University, Bethlehem, Pennsylvania; Louise Herot, Barlow High School, West Redding, Connecticut; Alice Houston, Seattle Public Schools, Washington; or Judy Minnehan, Oldham County School, LaGrande, Kentucky.

If it can be shown that central office supervisors do make a difference in the quality of curriculum and instruction, then school boards will need to reexamine their staffing priorities. □

"Supervisors' jobs are constantly in jeopardy at the bargaining table, but they seldom have an advocate during the negotiating process."

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Improving Instruction Through Focused Team Supervision

A team approach lets supervisors zero in on priority areas and strengthens their relationships with teachers.

WILLIAM E. BICKEL AND NANCY J. ARTZ

Increasingly tight budgets and demands for instructional improvement are forcing districts to re-examine the effectiveness of instructional supervision. One response to these issues is for supervisors to work from broad long-range instructional objectives, rather than short-term daily crises (Harris, 1977; Sullivan, 1982; Unruh, 1977). Another is for districts to develop supervisory teams who can concentrate their efforts and take advantage of their individual skills (Harris, 1976).

Focused team supervision is developing as part of Pittsburgh's School Improvement Program (SIP), now in its third year of operation in seven elementary schools. The SIP staff consists of a project director, a select teacher, one special education supervisor, and two regular education supervisors. Research on this supervisory approach is being carried out as part of a larger effort of the Learning Research and Development Center at the University of Pittsburgh, which is seeking to learn more about how to improve evaluation processes in school districts.

What is Focused Team Supervision?

Using focused team supervision, instructional supervisors and principals plan and work together, on a targeted set of instructional needs within a school. This approach differs from the ways supervisors have traditionally worked in Pittsburgh and elsewhere (see Figure 1). Focused team supervision in the SIP schools has five basic features:

1. *Data-Based Instructional Planning.* The commitment of the SIP staff to the use of data for instructional planning is the first feature. Figure 2 lists the wide array of sources that SIP principals and supervisors regularly review. Information from these sources provides a comprehensive and systematic way to identify needs, clarify problems, and set priorities that determine how supervisors and principals use time in each school.

Traditionally, a supervisor's priorities are determined in two ways. The first involves negotiating activities in a school on a daily basis with the principal and teachers. Their immediate needs, plus those observed by the supervisor, form the focus of that day's work. The second may involve responding to crisis calls for supervisory service that can disrupt any daily plans (for example, supplying a desk or books for a new student or attending a parent conference called by the principal).

The systematic use of a wide variety of data to structure the SIP supervisors' time makes planning more rational and consistent and provides a broader perspective for instructional decision making. It also leads to the development of the second basic feature of this approach—focusing on areas of greatest need.

2. *Focused Attention and Time.* There are often more problems in a

Figure 1. Approaches to Instructional Supervision

Focused Team Supervision	Traditional Supervision
Data-based instructional planning	Short-term, crisis planning
Focused attention and time	"Democratic," fragmented service delivery
Team planning and working	Isolation from colleagues
Regular/special education program collaboration	Regular/special education program separation
Collaborative supervisor/principal relationship	Non-coordinated supervisor/principal relationship

Figure 2. Sources of Data for Principals and Supervisors in the Pittsburgh SIP Schools

1. California Achievement Test (CAT) results—grade level, classroom, individual student data
2. Monitoring Achievement in Pittsburgh (MAP) test results—grade level, classroom, individual student data
3. Observational data produced by the LRDC documentation team
4. Pittsburgh Research-Based Instructional Supervisory Model (PRISM)—classroom teacher observations and conference performed by principals and supervisors
5. School steering committee work—identification of school-level needs
6. SIP basic skills monitoring system—grade level, classroom, individual student data
7. Student staffing process—individual student data
8. Teacher plans and objectives

William E. Bickel is Senior Scientist and Nancy J. Artz is Research Assistant, Learning Research and Development Center, University of Pittsburgh, Pennsylvania.

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school than administrators, supervisors, or other support personnel can adequately handle. A traditional response by supervisors to this dilemma can be called a "democratic" model of service delivery. Expected to meet all the needs of all the teachers and students in their assigned set of schools, supervisors often circulate to each classroom and give everyone a small but fairly equal share of their time and attention. This emphasis on being visible to teachers and administrators places supervisors in the position of trying to do too much for too many people and not feeling very effective with anyone.

In contrast, focused team supervision allows supervisors to concentrate their time and attention on priority areas determined by their data reviews. It is an explicit recognition that all needs within a school are not equally important and that choices must be made when educational resources are limited. This focused approach leads to the development of yearly long-range goals for each school. From these goals, short-term action plans are written every two weeks with specific objectives and time lines that guide the supervisors' daily activities. The SIP supervisors have used this approach during the course of the program to focus on individual students and teachers, on grade levels within schools, on subject areas within and across schools (such as reading instruction), on instructional elements for an entire school (such as lesson design, motivation, and directed teaching), and on projectwide programs (such as Early Learning Skills and full-day kindergarten). By using data to focus their work, supervisors feel they can achieve maximum results for the time they spend.

3. *Team Planning and Working.* Time must be allotted to the development of a successful team effort, and the SIP staff holds weekly staff meetings for this purpose. The meetings provide an open forum in which supervisors can discuss issues and problems, review data, and exchange ideas for solutions. Their discussions have identified common needs within the seven SIP schools, and appropriate personnel have been assigned to meet those needs.

This opportunity to meet and plan regularly with peers contrasts sharply with the isolation in which a supervisor traditionally works. Typically, supervisors are assigned individually to a set of schools and have little time to meet with colleagues working in other schools. Although general supervisory meetings are sometimes conducted by the central district administration, these meetings tend to be devoted more often to announcing new district policies than to systematic discussions among peers about common concerns and fresh ideas.

In addition to weekly staff meetings, SIP supervisors have biweekly planning sessions with each of the principals with whom they work. During these meetings, the supervisors, the SIP Director, and the principals examine recent school data, review the events of the past two weeks, and write an action plan for the next two weeks. Together with the staff meetings, these sessions permit the development of team planning, both across and within the SIP schools.

The supervisors also use a team approach to implement their plans. Teaming occurs chiefly when the time requirements or the size of the task demand it (for instance, reorganizing reading instruction in the 2nd and 3rd grades at one of the schools). The supervisors have teamed with their peers, with the select teacher, with the principals, and with the project director in an effort to do the job efficiently and with an appropriate level of support.

4. *Regular/Special Education Program Collaboration.* Teaming, especially at the program level, leads to the fourth feature of this supervisory approach—the collaboration of regular education and special education supervisors. This is in marked contrast to the traditional separation of these two groups. The staff meetings and planning sessions permit them to communicate about each other's programs on a regular basis.

In addition, the regular education and special education supervisors participate in a student staff process at each school, which brings together every professional with knowledge of a student. This process enables all three of the SIP supervisors to suggest mainstream instructional modifications for children who might otherwise have been in line for special education placement. These staffing meetings also give the special education supervisor a rare chance for contact with the referring regular education teachers.

5. *A Collaborative Supervisor/Principal Relationship.* The SIP supervisors feel that a cooperative, coordinated relationship between the instructional supervisor and principal is vital to the success of their work for two reasons: (1) the principal's role of authority can support supervisors' work with teachers, and (2) a cooperative effort between supervisors and principals provides a continuity of service usually not available from an itinerant resource. Focused team supervision is helping to develop this kind of relationship.

The SIP supervisors have identified two prerequisites to the success of such a relationship. The first is to build a common set of perceptions and goals to guide the work in each school. The use of a common data base and the development of joint action plans promotes a coordinated viewpoint.

The second prerequisite is the development of a set of compatible instructional skills. Both supervisors and principals must be able to effectively implement the action plans for each school. Traditionally, many principals have lacked detailed knowledge about instructional methods or materials because they were appointed to their positions for a variety of other reasons (such as effective discipline procedures, good community relations, and management abilities). The planning sessions permit the SIP staff to actually teach and model some of the instructional skills that principals need.

Focused team supervision promotes the systematic use of data to provide appropriate, continuous levels of support to priority instructional areas that enable supervisors and principals to efficiently meet the needs of each school. The SIP supervisors are enthusiastic about the improvement of their morale, the increased number of ideas available to them, and the broadened perspective they can bring to their work using this approach. In addition, the supervisors' focused, in-depth involvement in their schools has helped them to be perceived more as members of each school's staff than as itinerant outsiders, and has strengthened their relationships with the teachers with whom they work. □

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A Team Approach to Instructional Leadership

The team approach focuses on functions, not roles, making effective use of the talents of staff members.

ALLAN A. GLATTHORN AND NORMAN A. NEWBERG

Conventional wisdom suggests that the best way to improve schools is to strengthen the role of the principal as an instructional leader. While that advice seems useful for elementary schools and is generally supported by research (see, for example, Brookover and Lezotte, 1979), we believe that a team approach to instructional leadership is a more realistic method for improving secondary schools.

The Case for a Team Approach at the Secondary Level

Firestone and Herriott's (1982) study and our own research (1983) support other studies that conclude that secondary schools tend to be more loosely coupled than elementary schools. In the typical departmentalized secondary school, three factors result in a pattern of decentralized influence. First, there is less consensus among administrators and teachers about school goals due to the size of the school faculty and the diversity in academic background. Also, secondary teachers tend to have more influence over the important day-to-day issues of classroom management and curriculum decision making than do principals. The departmental structure and the more specialized nature of the curriculum reinforce the autonomy of the classroom teacher. Finally, the secondary principal, working with teachers who perceive themselves as subject-matter specialists, has less "expert power" than the elementary principal, who guides the work of classroom teachers who see themselves as generalists. In such loosely coupled organizations composed of several self-directing units, a decentralized team approach to leadership will probably be more effective.

A second argument for a team approach derives from an analysis of how secondary school principals perceive and execute their responsibilities. In his nationwide study of how school principals spend their time, Howell (1981) discovered that while elementary principals devoted approximately 30 percent of their time to instructional leadership, secondary principals spent only 20 percent of their time on such activities. Our own ethnographic study of four principals in urban junior high schools yielded similar findings. The principals in our study were more concerned with classroom discipline, school facilities, office responsibilities, and faculty relations. Although they were seriously con-

Allan Glatthorn is Professor of Education and Norman A. Newberg is Associate Professor of Education, Graduate School of Education, University of Pennsylvania, Philadelphia.

cerned about instruction and had read all the articles about "principal as instructional leader," they simply perceived that there were more pressing demands on their time and had delegated the responsibility for instructional leadership to trusted subordinates.

One principal in our study spent a great deal of time monitoring pupil conduct in the corridors and in the cafeteria, greeting pupils by name, encouraging some with a pat on the back, chiding others who had forgotten a school rule. He observed, "Of course I care about instructional leadership—but if I'm out in the halls setting a good example, then teachers also check conduct, and the whole climate of the school improves. You can't work on curriculum until you have good discipline."

The literature suggests that in this regard the principals we studied are typical of most secondary school principals. We suspect that secondary principals who delegate the responsibility for instructional leadership are responding constructively to their own tacit knowledge that they can serve a more useful role by providing general managerial direction, rather than by trying to impinge directly on curricular and instructional matters. A team approach to leadership enables the principal to do what he or she can do best and carry out the functions that have the highest priority.

The third reason we believe in a team approach to instructional leadership is that it emphasizes the critical leadership functions, rather than focusing on the role. We support the findings of Gersten, Carnine, and Green (1982), who identify four critical functions: giving feedback about instruction; providing incentives for implementing programs; demonstrating a visible commitment to the program; and monitoring the progress of all students through the curriculum. They conclude with this astute observation:

> We have identified these four elements as essential *support functions*. It appears that these are crucial activities that need to be performed for increased productivity in schools serving low-income children. It is not important who performs them—the building principals, the local teacher supervisor, curriculum specialists . . . as long as they are performed (p. 18).

One of the most effective instructional leaders in the schools we studied was the reading/language arts chairperson. Because a perceptive principal had recognized her talents and had legitimized her expertise, she was able almost single-handedly to improve the quality of teaching throughout the school by conducting staff workshops, developing and sharing materials, and encouraging colleagues to believe in the abilities of low-income minority children. In our survey teachers readily acknowledged that she was the school's instructional leader.

"A team approach to leadership enables principals to do what they can do best and carry out the functions that have the highest priority."

The final argument lies in the value of shared leadership. Despite the insistence that schools need charismatic principal-leaders, we must confront the reality that charismatic leaders are in short supply. And even when schools are fortunate enough to find such leaders, they tend not to stay too long in any position. One of the principals in our study was a strong charismatic leader, who almost by sheer force of his referent power had transformed a dying school into a renascent one. At the conclusion of our study, he moved on to a high school principalship. The loss was compounded because his most able vice principal was frequently absent due to illness. Thus when the principal left, a leadership vacuum was created. A team could not be counted on to pick up the leadership tasks. We believe that an organization is best served by leaders who empower others.

Developing and Implementing a Team Approach

We have developed a process for implementing a team approach to instructional leadership that we believe to be effective. Our discussions with experienced administrators suggest that the process can be implemented successfully, and our exploratory work in schools supports that judgment. The process involves four key stages: *diagnose, allocate, implement, evaluate*.

1. *Diagnose.* We begin by diagnosing the present state of instructional leadership, as perceived by the administrators and teachers. We have developed two instruments that seem to give reliable and valid data about perceptions of leadership.

One instrument, *Principal as Instructional Leader* (PAIL), yields useful information about the principal's leadership style, both from the principal's and the teacher's point of view. The instrument asks teachers to respond to several Likert-type items that describe a principal's actions. The survey results indicate to what extent the principal exhibits characteristics of the following four styles:

- Directive: attempts to provide an active, assertive leadership in curricular and instructional matters.
- Decentralized: attempts to locate leadership at the deparment or team level, giving much authority to team leaders.
- Teacher-centered: expects individual teachers to exercise instructional leadership.
- Monitorial: is primarily concerned with monitoring teacher adherence to district policies and guidelines.

We share these results with the principal, focusing on the major discrepancies between his or her perceptions and those of the teachers. We stress that there is no "best" style and encourage the principal to consider the appropriateness of his or her style in relation to staff maturity and organizational structure.

The second instrument, *Sources of Instructional Leadership* (SOIL), provides useful data for determining which individuals, in the perception of respondents, are performing the critical leadership functions. The instrument lists those leadership functions that the literature suggests are important. It also identifies the leadership roles typically found in a school: principal, assistant principal, district supervisor, team leader or department head, classroom teacher. Respondents are then asked to indicate for each role whether that role-incumbent provides leadership or contributes to leadership for each particular function. A factor analysis of the results of this second survey provides us

and the school personnel with a map of how leadership is presently distributed.

The SOIL instrument yielded several interesting findings in our study of urban junior high schools. In one school a dynamic assistant principal was identified as performing most of the instructional leadership functions. In a second school the department head was clearly perceived as the source of most leadership. In two of the schools the teachers did not believe that any individual was providing leadership in the functions identified. Such analyses help the principal understand how teachers perceive the distribution of instructional and curricular influence.

To validate the survey results, we also observe in the school and interview several administrators. These interviews and observations allow us to confirm or raise questions about the quantitative measures. We try not to limit ourselves to a single view of what instructional leadership means in a given school; rather we attempt to derive a composite view from several sources and perspectives, to ensure that our diagnosis is a sound one.

2. *Allocate*. We begin the allocation process by meeting with the principal, since he or she will play a central role in delegating the leadership functions. We review the data from the surveys and from any observations and interviews we have conducted and then through an open discussion help the principal reflect about the following issues:

- Does the leadership style of the principal seem appropriate in relation to the principal's talents, the nature of that organization, and the expectations of the teachers? What specific aspects of behavior might be modified?
- Which critical leadership functions does the principal wish to perform? We review the results from the two surveys, the observations, and the interviews. We help the principal examine his or her talents and analyze perceptions of the principalship in order to determine realistically how he or she can best lead.
- What constraints in the system will limit the extent to which leadership functions can be delegated? We examine district policies, role descriptions, and teacher association contracts to determine the limits of delegation.
- Which individuals should be involved in the next step of the allocation process? Here we assist the principal in identifying the key members of the leadership team—those individuals who are presently performing or who might well contribute to the leadership functions we have identified.

"With a team approach, the critical functions of leadership are assigned to those most capable of performing them, rather than being centralized in the principal's office."

The principal then convenes a meeting of the leadership team so identified. The survey data are reviewed, preliminary decisions made about the principal's role are discussed, and the group decides which individual should be primarily responsible for each leadership function—and which members can contribute to those functions.

This allocation process accomplishes three important tasks. First, it legitimizes the activities of those who have been providing leadership, acknowledging their contributions. Second, it attempts to bring about a better fit between the individual and the functions he or she is expected to perform, concentrating on individual talents rather than role descriptions. Finally, it enables the team to develop a more systematic plan, which avoids unnecessary duplication and ensures that all critical functions are appropriately assigned.

3. *Implement*. Each member of the leadership team is asked to prioritize the functions assigned and to develop an action plan for carrying them out. Predictably, the members of the team will be busy people with many responsibilities, and will need help in identifying the priority tasks and developing reasonable plans for accomplishing them. These plans are reviewed by the principal to ensure that all the critical functions have been provided for and that the action plans are both feasible and effective.

The faculty is then informed about the significant features of the team approach: What the critical leadership functions are, and who will be carrying them out. Keeping the faculty fully informed accomplishes two important goals: it helps the faculty know where the leadership resources are, and it establishes a system of professional accountability. If all involved know that the department heads have agreed to monitor lesson planning, then it is more likely that the function will be performed.

4. *Evaluate*. At the end of the school year, the effectiveness of the team plan is evaluated. The faculty are surveyed again, using the SOIL instrument, to determine who (in the teachers' perceptions) actually performed the designated functions. The results are then shared with the team as a basis for developing an improved strategy for the coming year.

With a team approach, the critical functions of curricular and instructional leadership are assigned to those on the staff most capable of performing them, rather than being centralized in the principal's office. The talents of a team are mobilized and a low-key system of professional accountability ensures that all the critical functions are being carried out by someone, rather than simply assuming that those tasks are being done. □

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Chapter 7.
Colleagueship in Supervision

Robert J. Alfonso and Lee Goldsberry

In recent years, interest in helping teachers assume greater responsibility for improving their own instruction and the instruction of their colleagues has grown. Because both literature and practice in the area of peer supervision are still so underdeveloped, it is not always clear what is referred to by the terms "peer supervision" or "colleagueship in supervision." These terms might describe a loose arrangement of teacher interaction and influence, the involvement of teachers on instructional and improvement teams under the direction of an administrator or supervisor, teachers taking more responsibility for developing instructional improvement programs, or the evaluation of nontenured teachers by colleagues. Sometimes the terms imply a nearly total teacher responsibility for the improvement of instruction; such responsibility is, of course, characteristic of the highest level of professionalism—members of a profession monitoring, disciplining, and seeking to improve themselves and their colleagues. Few professions obtain such a level, and those that do seldom work in bureaucratic structures as large and complex as school systems.

In general, proponents of peer or colleague supervision define such supervision in rather narrow terms. Most typically, proponents ask for the involvement of teachers in particular kinds of supervisory acts: planning inservice efforts, evaluation of nontenured teachers, classroom visitation and feedback, or observation of a colleague's instruction while using an interaction inventory system. Conceivably, enough teachers in the system, involved in enough different supervisory acts, and sufficiently trained in them, could represent a very broad range of typical supervisory behavior. Without coordination, however, these behaviors would lack direction and substance and would be merely random and unsystematic. It is unlikely that such acts could be very helpful over a long period of time, nor could they, in a technical sense, be viewed as supervision unless they were tied to and part of an on-going, comprehensive plan of instructional improvement.

Robert J. Alfonso is Associate Vice President and Dean of Faculties at Kent State University, Kent, Ohio. Lee Goldsberry is Assistant Professor of Supervision at Pennsylvania State University, University Park, Pennsylvania.

Perhaps one explanation for the current interest in colleagues providing supervision is that too little formal supervision is available for teachers. The professional teacher has a strong desire for help, for involvement with other professionals, for feedback on instructional processes and outcomes, and for new ideas. While much is made of the importance of instructional supervision, the typical teacher sees little of it and what is available is frequently of limited use. When supervisory time is in short supply and when the interests and abilities of the supervisor are unrelated to the needs of the classroom teacher, it is not surprising that teachers turn elsewhere for help. One place they can turn is to colleagues, persons who can frequently provide immediate help, practical suggestions, and support in times of difficulty and uncertainty. Furthermore, if supervisors are not technically competent—that is, skilled in the performance of those tasks most directly related to the teachers' work and to the improvement of it—then self-directed teachers are forced to seek help elsewhere. Colleagues have the value of proximity, immediacy, and a first-hand understanding of the other's "workspace." Frequently, teachers who need help or seek observation or opinion have no one to whom to turn, no one to whom to say, "How am I doing, how do you think it went today?"

In many school systems, formal feedback on teaching performance may come no more than once a year and then in a quite perfunctory way. One of the tragedies of American education is that teachers work in isolation. Their immediate superiors often have only a rather generalized perception of their teaching performance. Teaching is still largely a solo act, observed, appreciated, and evaluated primarily by students. There is little contact among colleagues, classroom doors are seldom opened to each other, and teachers who are members of the same staff in the same school, even in the same grade or discipline, maintain a collusive and almost deliberate ignorance of the work of their peers. It is essential that such barriers be broken down and that teachers feel responsible for improving their instruction and for assisting their colleagues in their own self-improvement; this concept characterizes other professions. Although there is little contact and mutual responsibility among teachers, studies still show that teachers report other colleagues to be their first source of professional help, even when supervisory assistance is available.[1]

Another possible explanation for the growing interest in colleagueship in supervision is the uncertain authority of instructional supervisors. Supervisors have frequently been admonished to operate

[1] Dan C. Lortie, *School Teacher: A Sociological Study* (Chicago: University of Chicago Press, 1975); Mary Lou Holly, "A Conceptual Framework for Personal-Professional Growth Implications for Inservice Education" Ph.D. dissertation, Michigan State University, 1977); Gilbert De Landsheere, "The Causes of the Resistance of Teachers to Innovation," in *The Teacher and Educational Change: A New Role*, vol. I (Paris: Organization for Economic Cooperation and Development, 1974).

from the authority of competence rather than the authority of position.[2] As a result, they are tempted to play down if not reject their formal organizational authority and behave in a clearly "helping" relationship, if not a collegial one. At the same time, teachers and teacher organizations, with a heightened sense of professionalism and a growing desire for control of their work, have also resisted the imposition of formal authority. Further, when either a helping relationship or one based on position power is not backed by technical competence, the rejection of authority becomes more complete. In addition, teacher negotiators attempt to gain collective bargaining contracts giving teachers as much control as possible over their work, the processes of instructional improvement, decision making on assignment, additional responsibilities, and, of course, employment and tenure.

In rejecting their legitimate authority, supervisors contribute to the problems of instructional improvement. While the authority of position is useless if not backed by technical skill and good human relations, a supervisor's competence is made more powerful when it is supported by the authority of position. Position authority will do little to strengthen an otherwise weak instructional supervisor, but an intelligent and competent supervisor can be even more effective when seen as having formal authority. When neither formal authority nor competence is present, instructional supervision is a hollow exercise, fully meriting the disdain and disregard with which many teachers view it. Under such circumstances, it is not surprising that intelligent and committed teachers turn to others for help in improving their instruction.

This chapter will explore the concept of colleagueship in supervision through discussion of the definition and purposes of instructional supervision, will describe the potential of colleagues and teacher collaboration as a professional development resource, and will conclude with a discussion of some of the organizational barriers to colleagueship in supervision.

Colleagueship and Formal Supervision

Supervision is a function found in all formal organizations; no organization can exist without it, yet the nature of the organization, its work system, and its purpose determine the form supervision takes. In most organizations, supervision occurs in close proximity to the work setting. In fact, it is from that proximity that supervision, in a generic sense, acquires its definition. In the strictest sense it means constant presence, overseeing or directing others, and monitoring their work in order to ensure effectiveness and efficiency. Supervision exists so that an organization's goals can be understood, procedures followed,

[2] Thomas J. Sergiovanni and Robert J. Starratt, *Supervision: Human Perspectives*, 2nd ed. (New York: McGraw-Hill, 1979), pp. 37-50; Arthur Blumberg, *Supervisors and Teachers: A Private Cold War*, 2nd ed. (Berkeley: McCutchan, 1980).

schedules met, and adjustments made when goals are not reached. Supervision is related to and responsible for the productive life of an organization. The purpose of supervision, then, is the same in all types of organizations: "To provide the conditions and promote the behavior necessary for the achievement of organizational goals."[3] The classic definition of supervision is to support and enhance an organization's work system and to ensure productivity, quality, and achievement of organizational goals. In all organizations, supervision is the critical link between organizational goals and production. Typically, the supervisor provides constant direction and help. Betts describes a supervisor as a person "who is given authority and responsibility for planning and controlling the work of the group by close contact. . . . Broadly speaking, this definition means that a supervisor may be delegated the authority to engage, transfer, suspend, reprimand, or dismiss an employee under his control."[4]

In the precise meaning of the term, there are probably very few supervisors in education. While many have the title, analysis of their behavior indicates a rather sharp divergence between what they do and the classic definition of supervision. But, as noted, the nature of an organization defines supervisory processes; one would not expect the supervisory structure in schools staffed by highly trained professionals to be the same as the supervisory structure on an assembly line in a large industrial plant. The greater the autonomy and right to make individual decisions in relation to one's work, the less "close-in" the supervision. Teachers seek and need control over their work and see themselves as professionals and independent decision makers. Therefore, supervision in schools is expected to be less frequent and more informal. While the classic definition of supervision also applies to supervision in schools, it must be recognized that the unique characteristics of schools and of teachers shape the form that supervision takes.

In schools, supervision is both a function and a role. Supervision is carried out by many persons; some carry the title of "supervisor," others do not. Those who carry the formal designation of supervisor seldom behave as supervisors 100 percent of the time; they frequently engage in managerial or administrative responsibilities only remotely related to the task of instructional improvement. On the other hand, there are those in school systems who carry administrative titles who occasionally engage in supervisory behavior. The function of supervision is generally widespread in schools, and there are times when teachers themselves engage in behaviors that could be described as supervisory.

If supervision is a function—not merely a role—to which many persons in a school contribute, then teachers can also be viewed as on

[3] Robert J. Alfonso, Gerald R. Firth, and Richard F. Neville, *Instructional Supervision: A Behavior System*, 2nd ed. (Boston: Allyn & Bacon, 1981), p. 6.

[4] Peter Betts, *Supervisory Studies* (London: MacDonald and Evans, 1968), pp. 6-7.

occasion contributing to the purposes of supervision. *Contributing* to supervision and carrying out *formal* responsibilities for supervision are two different things. In the technical sense of formally-conferred organizational authority, a teacher cannot be a supervisor; when such organizational authority is granted, the teacher then leaves an instructional role—ceasing to be a teacher—and enters a supervisory one. Given the classic definition of supervision (control, direction, assignment, evaluation) teachers cannot also be supervisors. Supervision is a formal organizational act; moreover, supervision always implies a superordinate-subordinate relationship. The terms "peer supervision" and "colleague supervision" may be contradictions, for one cannot be both a peer/colleague and a supervisor at the same time. Clearly, teachers can and should help each other in a variety of ways, but a supervisor is vested with organizational authority for decision making about others.

The profession at large and the Association for Supervision and Curriculum Development have long had difficulty accepting a concept that is so generally accepted in other organizations and professions. We have long struggled to make a supervisor a colleague of teachers rather than an authority figure, thus reducing the potential effectiveness and power of supervision.[5] Now the concept of "teacher as supervisor" is being explored. Such discussions blur the purpose and importance of supervision in organizations and mislead both supervisors and teachers about their respective roles.

A clear distinction needs to be made between the contributions of teachers to the improvement of instruction and the act of supervision as a formal, organizational expectation. For organizational purists, the concept of "teacher as supervisor" is impossible to accept. How one defines supervision, of course, has much to do with whether such a concept can be accepted. Given the blurred definitions of instructional supervision and the continued arguments about the extent of authority in such roles, the concept of peer or colleague supervision is an attractive one to many people. Without a clear understanding of formal supervision and of the possibilities and limitations of colleagueship, the continued discussion and promotion of greater roles for teachers in supervision may only further weaken the effectiveness of instructional supervision.

But formal supervision in schools is in short supply, and teachers, in helping, supporting, and assisting each other, can provide a valuable addition to formal supervision. Moreover, in work systems with a high

[5] Richard L. Foster, "Educational Supervision: Dead or Alive?" in *Changing Supervision for Changing Times* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1969), p. 31; John C. Lovell, "A Perspective for Viewing Instructional Supervisory Behavior," in *Supervision: Perspectives and Proposition*, ed. William Lucio, (Alexandria, Va.: Association for Supervision and Curriculum Development, 1969), p. 18; Louise M. Berman and Mary Lou Usery, *Personalized Supervision* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1966), p. 49.

percentage of professionally trained personnel, colleagues commonly share knowledge in order to improve each other's practice.

Because it is so fragmented, instructional supervision is difficult to identify and describe; it is the responsibility of many persons, not just a few who hold the title of supervisor. While such a fragmented system of influence has some inherent weaknesses—lack of focus, inefficiency, mixed signals, and a certain haphazardness—it also has some strengths. Making persons at several levels responsible for the improvement of instruction can create links and, if effectively coordinated, requires dialog and cooperation among many persons. The nature of schools and the nature of the supervisory process within them not only make possible but require the active collaboration of teachers in the process of instructional improvement; they are a very important part of the process and an invaluable growth source for colleagues. Although teachers cannot be supervisors, their rich potential as a source for the growth of their colleagues has never been adequately tapped. A good supervisory program would fully utilize such a rich resource.

Colleagues as a Professional Development Resource

Does "colleagueship in supervision" refer to teams of supervisors working together to improve the effectiveness of schools and simultaneously to refine their own professional skills? Does it suggest that supervisors and teachers should pursue these ends in partnership? Or does it suggest that teachers should collaborate with one another for the same reasons? To all three questions, the answer is yes.

As used in this chapter, "colleagueship" refers to a relationship characterized by collaborative efforts to accomplish common goals. Collaboration implies both mutual involvement in identifying and selecting specific objectives and mutual responsibility for designing, implementing, and evaluating strategies to achieve these objectives. Common ownership of both the "targets" and the processes used to "hit them" is achieved through shared authority. Too often schools adopt a participative approach in the pursuit of predetermined objectives regardless of the appropriateness or importance of these targets *as perceived by the teachers*. The result is a flimsy facade of collaboration in which the only latitude given the individual teacher is how to comply. Such teacher participation is *not* an example of colleagueship since only nominal collaboration is used. Further, instead of producing common commitment to the task at hand, this artificial involvement of teachers in the decision making process is more apt to produce staff alienation.[8]

A goal common to both teachers and supervisors is instructional improvement. When a supervisor and a teacher (or group of teachers) cooperatively interact to identify and implement changes that will

[8] Sydney Thompson, "Motivation of Teachers," ERIC document, ED 70 009, 1979.

positively influence student educational growth, and when these decisions are made jointly, irrespective of formal authority, they are operating in colleagueship. Sergiovanni and Starratt state that "Neither the teacher's autonomy as a professional nor the supervisor's responsibilities as a professional are compromised in the process since the relationship is based not on authority but on a commitment to professional improvement."[7]

Advantages of Colleagueship

Three advantages of developing colleagueship in supervision are noteworthy. First, the human resources of the school are mobilized in a joint effort to improve instruction. Second, the long overdue recognition that classroom teachers have much to contribute to the quest for instructional improvement, coupled with increased responsibility for the design and implementation of improvement strategies, can produce a sense of personal achievement as well as a better functioning school. Recognition, responsibility, and achievement are termed "motivators" by Herzberg and are associated with job satisfaction.[8] Therefore, successful colleagueship may well contribute to increased job satisfaction for classroom teachers. In an era when teacher turnover is low and when "burn-out" is a growing problem, increasing the intrinsic rewards of teaching might be the single greatest contribution of colleagueship.

Third, the successful introduction of instructional innovations is more likely in schools having active colleagueship. Berman and McLaughlin report that the quality of working relationships among classroom teachers has a powerful effect on the effective implementation and continuation of projects involving educational change.[9] A history of collaboration among teachers and supervisors would likely contribute greatly to good working relationships. Further, successful collaborative efforts may well enhance teachers' perceptions of their own professional competence by reinforcing their belief that they can positively influence the achievement of their students. This sense of efficacy also has a powerful positive effect on the success of innovations in schools.[10]

Recognizing the potential contributions to instructional improvement through teacher collaboration, instructional supervisors must assume responsibility for fostering such interaction. Merely providing structured opportunities for teachers to share and to reflect upon their accumulation of "ordinary knowledge" (discussed by McNeil in Chapter 2 of this volume) would be a fruitful first step in harnessing and

[7] Sergiovanni and Starratt, *Supervision*, p. 298.

[8] Frederick Herzberg, as cited in Sergiovanni and Starratt, p. 164.

[9] Paul Berman and Milbrey Wallin McLaughlin, *Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations* (Santa Monica, Calif.: Rand Corporation, 1978).

[10] *Ibid.*

coordinating the vast human resources available in schools. The onus for providing the leadership and coordination necessary to develop a climate conducive to and the impetus for such collaboration belongs to instructional supervisors. It will not be an easy task. Because channels of communication among teachers are typically so poorly developed, concerted effort is necessary to develop active collaboration.[11]

Leadership in the Development of Colleagueship

While colleagueship among administrators within a school district, and even among representatives of several school districts, is desirable in order to coordinate common activities, the focus in this chapter is on developing colleagueship within a *single* school. Not only does the proximity of educators in a single building enhance the opportunity for regular collaboration, but "there is increasing evidence that shows the largest unit of successful change in education is the individual school."[12]

Given the poorly-developed channels of communication in schools, the development of colleagueship where it has long been absent is a substantial change for most schools. Introducing and developing active collaboration within a school is, therefore, an ambitious, innovative project. Berman and McLaughlin comment that "The importance of the principal to both the short- and long-run outcomes of innovative projects can hardly be overstated."[13] The necessity for active support from the building principal in developing a working colleagueship in supervision seems obvious. The development of the shared leadership characteristic of colleagueship demands committed effort from the school's formal leadership.[14] According to Blumberg, "The higher the value the principal places on, *and behaves in,* an openly communicative and collaborative style, the more teachers will be inclined to risk being open and collaborative [Emphasis added]."[15] By openly espousing and modeling collegial interaction, the building principal provides needed support for the development of colleagueship—necessary, but not sufficient, impetus for change. In addition to the visible commitment of the school leadership, structured opportunities for meaningful, collaborative interaction are also needed.

The formation of staff groups to address ad hoc concerns, as discussed by Sergiovanni in Chapter 8 of this volume, suggests one

[11] Robert S. Fox and Ronald Lippitt, "The Innovation of Classroom Mental Health Practices," in *Innovation in Education,* ed. Matthew B. Miles (New York: Bureau of Publications, Teachers College, Columbia University, 1964).

[12] Fred H. Wood and Steven R. Thompson, "Guidelines for Better Staff Development," *Educational Leadership* 37, 5 (February 1980): 375.

[13] Berman and McLaughlin, *Federal Programs.*

[14] David Weingast, "Shared Leadership—'The Damn Thing Works,' " *Educational Leadership* 37 (March 1980): 502-506.

[15] Blumberg, *Supervisors and Teachers,* p. 211.

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forum in which collegial interaction can be modeled and developed. Whether the group is addressing classroom management, the language arts curriculum, or inquiry learning, the experiential base for collaborative effort is present. The role of the supervisor in such a group is to facilitate the collaborative process by drawing ideas and opinions from all participants and by contributing his or her own expertise as an active member of the group. Ideally, groups of this sort will generate, implement, *and then evaluate* innovative approaches. Through participation in this informal approach to action research, a teacher becomes an active partner both in designing potential instructional improvements and in assessing their impact. By sharing benefits or difficulties of implementation unique to their own classrooms, teachers assume a functional leadership role conducive to and characteristic of colleagueship. As the functional leadership of the group develops, the supervisor's role within the group shifts from primary initiator to one of more equal footing with the rest of the group. Frequently, teachers need individual help in translating innovative ideas into classroom practice and, in such cases, clinical supervision may prove invaluable.

Clinical supervision emphasizes and works to develop collegial relations between supervisors and teachers.[16] (Clinical supervision is discussed by Garman in Chapter 3.) Oversimplified, clinical supervision is a structured approach to classroom observation and conferral intended to help teachers evaluate and improve instructional performance. Jackson says:

> As everyone who has been in charge of a classroom knows, it is very difficult to teach and to think about teaching at the same time. What is needed, therefore, is both the time and the tools for the teacher to conceptualize his experience, to imbue it with personal meaning in a way that alters his way of looking at his world and acting.[17]

Through the careful collection of classroom data and through collegial conferences in which the "personal meanings" of the teacher are emphasized, competent clinical supervison exemplifies colleagueship in supervision. Yet, properly done, clinical supervision requires expertise and time not currently available in most schools. While most schools could feasibly offer clinical supervision to a few teachers so that the technique is modeled and colleagueship demonstrated, staffing plans preclude delivering clinical supervision to all teachers who could profit from it. How then can teachers get the support necessary to analyze their classroom performance and to identify and implement needed improvements?

[16] Robert Goldhammer, *Clinical Supervision: Special Methods for the Supervision of Teachers* (New York: Holt, Rinehart and Winston, 1969); Morris Cogan, *Clinical Supervision* (Boston: Houghton Mifflin, 1973).

[17] Philip W. Jackson, "Old Dogs and New Tricks," in *Improving Inservice Education: Proposals and Procedures for Change*, ed. Louis J. Rubin (Boston: Allyn and Bacon, 1971).

Colleagueship Among Teachers

I would like one day to see schools in which teachers can function as professional colleagues, where a part of their professional role was to visit the classrooms of their colleagues, and to observe and share with them in a supportive, informed, and useful way what they have seen.[18]

The notion of practitioners collaborating with colleagues is certainly not new. In many occupations, interaction between co-workers directed toward improved peformance is expected and common, for example, among partners in a law firm, physicians in practice together, carpenters on a job site, or actors in a play. Interaction between and among teaching colleagues is not, per se, supervision, but when teachers exchange ideas regarding promising practices, when they seek out one another for counsel on an instructional problem, or when they simply provide encouragement after a particularly tough day, the major function of instructional supervision, to improve instruction, is being served. Unfortunately, these peer linkages among classroom teachers are usually ignored by the formal supervision system—leaving teachers on their own to develop these potentially helpful relationships. When teachers are unable to develop collaborative links with their colleagues, they are deprived of a powerful resource for professional growth and support. It is not surprising that words like lonely and isolated have described the job of teaching.[19]

The structure of schools, generally characterized by the bureaucratic features of formalization and stratification, further insulates the classroom teacher. Not only are teachers at work almost always separated from their colleagues but traditional bureaucratic structures generally provide minimal, if any, opportunities for meaningful dialog among teachers regarding the aims and means of the educational effort. Hage indicates that bureaucratically-oriented structures inhibit the adaptiveness and job satisfaction of workers.[20] In schools, where the structural characteristics of bureaucratic organizations are compounded by the physical isolation of teachers at work, the resultant dearth of professional interaction among teachers not only deprives them of a valuable tool for self-improvement, but also *deprives the school organization of a rich pool of human talent for organizational improvement efforts.* By developing collaborative networks among teachers and by providing structured opportunities for peer review, schools can enrich the organizational climate while providing classroom teachers a potentially powerful vehicle for instructional improvement.

[18] Elliot W. Eisner, "The Impoverished Mind," *Educational Leadership* 35 (May 1978): 622.

[19] Louis Kaplan, *Education and Mental Health* (New York: Harper and Row, 1971); Marc Robert, *Loneliness in the Schools (What to do About It)* (Niles, Ill.: Argus, 1973); Lortie, *School Teacher*; Blumberg, *Supervisors and Teachers*; Betty Dillon-Peterson and Bruce Joyce, "Staff Development/Organization Development—1981," in *Staff Development/Organization Development* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1981).

The collegial relationships between and among teachers have been minimized and undersold as a means of growth. Given time and opportunity, teachers cannot only learn from each other, but also serve as confidantes for feedback on teaching approaches and as respondents to teaching philosophy and style. . . Without this opportunity, it is easy to retreat into a shell of secrecy and become defensive about teaching practice.[21]

In spite of the dearth of formal mechanisms for developing collegial support, teachers still report that their best sources for innovative ideas regarding their teaching are other teachers.[22] Recognition by supervisors that teachers turn to their teaching colleagues with problems and for new ideas is long overdue; it is time for supervisors to maximize the value of this collegial approach to professional growth by organizing and coordinating these collaborative efforts. A structured system of intervisitation is one way to start.

The value of observing the teaching methods, techniques, and styles of other teachers (intervisitation) has long been recommended as a professional development tool for teachers.[23] When combined with post-observation conferences, intervisitation offers a potentially powerful avenue for teacher collaboration directly pertaining to classroom practice. Evans attributed to intervisitation among teachers in British infant schools the successful development of self-analysis and continued improvement.[24] Roper, Deal, and Dornbush explored a system of intervisitation and peer evaluation among elementary teachers and reported that "teachers can and will help each other perform better on their jobs."[25]

The attractions of intervisitation as a vehicle for colleagueship to improve performance are: first, actual classroom performance is the basis for improvement; second, the observing teacher is in a position to note details that may elude the teacher who is absorbed with teaching; and, third, the observing teacher may improve his or her own teaching as a result of the intervisitation. However, teachers' skills in observing teaching and in conferring to analyze classroom events may not be adequately developed. Further, teachers who are unfamiliar with observation and conferral techniques may be reluctant to serve as observers, may resist broaching sensitive topics, or may do so in a manner that provokes alienation or defensiveness rather than collaboration.

[21] Charles Galloway and Edward Mulhern, "Professional Development and Self Renewal," in *A School for Tomorrow*, ed. Jack R. Frymier (Berkeley, Calif.: McCutchan, 1973).

[22] Gilbert DeLandsheere, "The Causes of the Resistance of Teachers to Innovation," in *The Teacher and Educational Change: A New Role*, Volume I. Paris: Organization for Economic Cooperation and Development, 1974; Sergiovanni and Starratt, *Supervision*; Blumberg, *Supervisors and Teachers*.

[23] Arvil S. Barr and William H. Burton, *The Supervision of Instruction* (New York: Appleton, 1926); Kimball Wiles, *Supervision for Better Schools* (Englewood Cliffs, N.J.: Prentice-Hall, 1955).

[24] Ellis D. Evans, *Contemporary Influences in Early Childhood Education* (New York: Holt, Rinehart, and Winston, 1975).

[25] Susan Roper, Terrence Deal, and Stanford Dornbush, "Collegial Evaluation of Classroom Teaching: Does It Work?" *Educational Research Quarterly* 1 (Spring 1976): 66.

Some writers recommend peer-delivered clinical supervision as a collaborative device to improve instruction.[26] Harris disagrees: "Those who argue that sensitive, competent teachers with limited training can guide the clinical supervision processes are engaging in wishful thinking."[27] Perhaps the controversy is one of semantics; it may well be inappropriate to refer to a system of peer review and conferral as clinical supervision. First, it is *not* supervision. As discussed earlier, supervision involves a superordinate-subordinate relationship. This is clearly not the case in peer review. (In fact, in our opinion, "peer supervision" is a contradiction in terms much like "democratic dictatorship.") Further, the originator of the term "clinical supervision," Morris Cogan, clearly establishes that the competencies needed by clinical supervisors are complex and difficult to master, requiring extended preparation and a "critically examined induction into practice."[28] Yet, Cogan makes equally clear that a central objective of clinical supervision is to develop within teachers the abilities to be analytical of teaching performance, to interact openly with others about teaching, and to be self-directing. Given teachers with these capabilities and realizing that clinical supervision can currently be offered to only a small number of teachers, is it wishful thinking to suggest that those teachers who have benefited from clinical supervision could observe and confer with other teachers to mutual advantage? Goldhammer answers this question explicity: "The supervision we envision is intended to increase teachers' incentives and skills for self-supervision and for supervising professional colleagues."[29]

The limited research into systems of peer review based on the clinical supervision model is encouraging, although inconclusive. Simon briefly oriented teachers in an elementary school to clinical supervision in preparation for intervisitation.[30] Each teacher both observed and was observed by a fellow teacher, and Simon reported that teachers valued this approach.

In a study by Goldsberry, 15 elementary teachers from four schools in a single school district voluntarily participated in a semester-long course on colleague consultation, a form of peer-delivered clinical supervision.[31] During this training, each teacher was observed teaching for three cycles of consultation, served as an observer-consultant for

[26] John Withall and Fred H. Wood, "Taking the Threat Out of Classroom Observation and Feedback," *Journal of Teacher Education* 30 (January-February 1979): 55-58.

[27] Ben M. Harris, *Improving Staff Performance Through Inservice Education* (Boston: Allyn and Bacon, 1980).

[28] Cogan, *Clinical Supervision*, p. 10.

[29] Goldhammer, *Clinical Supervision*, p. 55.

[30] Alan E. Simon, "Peer Supervision: An Alternative," paper presented at the Annual Conference, Association for Supervision and Curriculum Development, Detroit, March 3, 1979.

[31] Lee F. Goldsberry, "Colleague Consultation: Teacher Collaboration Using a Clinical Supervision Model" (Ed. D. dissertation, University of Illinois, Urbana-Champaign, 1980); Lee F. Goldsberry, "Colleague Consultation: Instructional Supervisor Augmented," in *Critical Policy Issues in Contemporary Education: An Administrator's Overview*, ed. Louis J. Rubin (Boston: Allyn and Bacon, 1980).

three cycles, and monitored three cycles of consultation. During the semester following the training, 13 of the 15 teachers trained as colleague consultants paired with teachers in their schools who had not participated in the training and delivered six cycles of colleague consultation. All 13 teachers who received the colleague consultation reported it to be helpful. Twelve of these teachers specified some change in their approach as a result of the experience: nine specified changes in actual teaching practice; three reported altered classroom structures or increased awareness of aspects of their teaching. Three of the 13 teachers who served as colleague consultants reported the experience did not affect their own teaching; five reported the experience had a positive effect on their attitude toward teaching or being observed; the remaining five reported performance improvements made as a result of the experience. Teachers involved in this study specifically mentioned increased colleagueship as a benefit of their participation.

When teachers collaborate with one another, the role of the supervisor is altered but not at all diminished. Initially, the supervisor is the catalyst for organizing colleagueship among teachers. The supervisor must provide training in observation and conferral techniques, must model both the techniques and colleagueship, and must arrange time for training and for peer review and conferral. As peer review is implemented, the supervisor serves both as a resource for process improvement and as the initiator and model for evaluation of the process. The leadership demanded of a supervisor in a school with active colleagueship is greater than that required in the traditional bureaucratic school because the complexity of coordinating the involved professionals in an adaptive situation cannot be done through generating formal rules, or even standardized procedures. Ample time, zealous effort, and a tolerance for frustration are necessary to develop and maintain colleagueship in supervision. The payoff is active involvement in a collaborative effort to improve instruction — to think that meaningful improvement can occur without such an investment is truly wishful thinking.

Organizational Barriers to Colleagueship

This chapter, thus far, has explored the concept of colleagueship in supervision, the distinction between colleague contributions and formal supervision, and colleagues as a resource for professional development. While colleagues are, without doubt, a valuable resource and can make important contributions to the processes of instructional improvement, there are obstacles to the development of colleagueship. Chapter 11 of this book details the numerous ways school bureaucracy inhibits the development and implementation of supervision. While the discussion of bureaucratic structures deals primarily with their impact on formal processes of supervision, school organization structure also poses prob-

lems for the development of colleagueship in supervision. The typical workday of a teacher, the inadequate time for interaction with colleagues, the cellular organization, and the physical structure of most school buildings—compartmentalizing each teacher in a room almost impervious to the influence or observation of colleagues—all work against the concept of colleagueship in supervision as discussed in this chapter.

If one were to design a physical structure and a workday that would virtually guarantee isolation from one's colleagues, one could hardly find a better model than a typical school building and the typical workday of a teacher. If teachers are to be resources in a program of instructional supervision, barriers of time and distance and the tradition of privacy will have to be overcome. With some exceptions, schools are not characterized by a high level of professional interaction among staff. The use of colleagues as a resource for professional development requires a modification in school organization as well as school climate. Historically, many attempts to involve teachers in curriculum planning and instructional improvement have failed because of time constraints; teachers have been asked to add new responsibilities to an already full schedule or squeeze work sessions into an inadequate time span. In order for colleagueship in supervision to be truly effective, a more professional model of teaching and an improved teaching environment must emerge. While time and work load are certainly barriers, another obstacle to colleagueship is the kind of expectations a school system has for teachers. If teachers are not viewed and treated as professionals, they cannot be expected to be effective in assisting colleagues in instructional improvement. A high level of professional behavior first requires a parallel level of professional respect and treatment.

The prevailing milieu of the school is also a barrier to colleagueship. When hired, teachers seldom see themselves as joining a teaching team, since other teachers are rarely involved in the interview and selection process. Neither does the faculty see the new person as joining a team, and they feel little or no responsibility for helping to ensure the success of a new teacher. As a result, experienced teachers seldom share effective practices with new colleagues. A new teacher quickly seeks to establish an identity, built on a grade assignment, a teaching discipline, and a classroom—a domain that becomes a private enclave and a retreat from the outside world as well as, in some cases, a retreat from the world within the school. A call for colleagueship in supervision is also a call, then, for new organizational forms and patterns of interaction in schools.

In some cases, there is not only a lack of communication and interaction among teachers, but a deliberate effort to avoid sharing good ideas. Administrative and supervisory staff are in large measure responsible for the kind of climate that exists in a school. If a climate exists in which teachers feel they are in competition, they will seek advantage

over others by holding on to good ideas. Research indicates that in competitive professions and businesses, ideas are seldom shared.[32] Doctors, for example, may share new ideas on medical practice but restaurant owners do not share recipes. Leadership behavior creates similar behavior patterns among followers, and administrators and supervisors are responsible for creating the kind of climate in schools that contributes to or inhibits colleagueship. The absence of colleagueship and sharing of practices is an unhappy commentary on a group of people who, in fact, all serve the same client or clients.

In school systems operating under collective bargaining agreements, there may be additional barriers to teacher collaboration for instructional improvement. While collective bargaining agreements could be written in ways that recognize and support such efforts, an analysis of agreements indicates they generally restrict rather than support such work.[33] Agreements typically specify the number of hours a year during which teachers can be asked to engage in instructional improvement and the amount of advance notification needed, the maximum length of any one meeting, how observations shall be reported, the number of classroom observations allowed per year, and who should be involved in an evaluation conference. While these are only a few examples of provisions in contracts, the kind of prescription and rigidity that charcterizes most negotiated contracts works against the climate and openness necessary to develop colleagueship. Teachers and supervisory personnel will have to find ways of working within the constraints of collective bargaining agreements and, if a supervisor is to be a contributing partner in colleagueship in supervision, then certain kinds of supervisory involvement may need to be viewed as falling outside the terms of the contract and, therefore, not in conflict. In cases where collective bargaining or other issues create sharp divisions and a "we-they" attitude between teachers and administrators, rigid adherence to the terms of a contract will make colleagueship far more difficult. Supervisors need to create formal communication systems that are unaffected by contract provisions, and the promise of colleagueship is that teachers, themselves, can help create such systems and initiate involvement with their colleagues—involvement which, if promoted formally by supervisors, might be seen as violating contract provisions.

The secondary school poses special problems for those interested in colleagueship in supervison. Long a bastion of privacy and independence, a feifdom presided over by the strong figure of the principal, the high school has always been difficult terrain for the instructional supervisor to navigate. The majority of research and development in supervision has taken place in elementary schools, and writers

[32] Herbert F. Lionberger, "Diffusion of Innovations in Agricultural Research and in Schools," in *Strategy For Curriculum Change* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1965), p. 45.

[33] Alfonso, Firth, and Neville, *Instructional Supervision*, pp. 441-452.

in the field of supervison continue to neglect the high school.

The high school and its faculty are fragmented by both departmental structure and by the orientation of the faculty to their teaching field. Such departmentalization works against communication, against the open-door classroom, and against schoolwide efforts of instructional improvement. In contrast with elementary teachers, secondary teachers are less interested in inservice programs and maintain a far more private world of teaching.

Yet, despite these constraints to instructional improvement and supervision, high schools offer unique opportunities not found in elementary schools. The failure of the profession has been its lack of recognition of the unique characteristics of secondary schools and the dynamics of life within them. Effective supervision in secondary schools and effective colleagueship in supervision require that attention be directed to those issues that are of most concern to high school faculty. They must be met on their own "turf," and for them this is the discipline they studied and have been hired to teach. While there may be other concerns that supervisors and administrators believe to be of critical concern, the entre must almost always be through the teaching field.

It is the teaching field that provides commonality and colleagueship among high school teachers, and the compartmentalization of the disciplines in the high school that so frequently makes instructional supervision difficult, can work as a valuable aid in developing a program of colleagueship as a resource. The high school department, for example, can become the initial unit for colleagueship in supervision, and the department chairperson can play a critical role in developing the climate and process to bring it about. The field of instructional supervision has rather badly neglected the department chairperson; yet, the chairperson is in a unique position to provide the kind of "close in" supervision that resembles the classic definition of supervision. Moreover, the chairperson has the unique ability to make a major contribution to the development of colleagueship as a resource for professional development, as a chairperson is one of the few individuals in the school system who is seen both as a colleague and a supervisor. The chairperson is daily involved in the teaching act, yet also has daily responsibility for providing leadership for a faculty group.

The secondary school, generally viewed as unresponsive to instructional improvement efforts, might in fact—when properly understood—be a very fertile ground for the development of the concept of colleagueship in supervision.

Summary and Conclusion

"Colleagueship" has been defined in this chapter as a relationship characterized by collaborative efforts to accomplish the common goal of

instructional improvement. "Supervision" denotes a function characterized by a superordinate working through and in close proximity with subordinates to accomplish organizational goals. For instructional improvement—the primary mission of supervision in education—to be successful, the active cooperation of teachers is essential. The development of colleagueship between teachers and supervisors and among teachers seems to offer three major benefits: 1. mobilization of the human resources of the school for the formidable task of instructional improvement; 2. increased intrinsic rewards to and hence job satisfaction for teachers; and 3. increased likelihood of successful implementation of instructional innovations.

The individual school is recommended as the largest administrative unit in which to initiate efforts to develop colleagueship, although in some high schools the department may well be the place to begin. Active support from the building principal is crucial for successful development of colleagueship. Instructional supervisors must assume responsibility for initiating collaborative, collegial interaction. Ad hoc groups and clinical supervision are two vehicles for developing and employing colleagueship in a supervisor-teacher relationship.

As a complement to formal supervision, structured opportunities for teachers to collaborate with other teachers offer great potential for professional development and instructional improvement. Colleagueship among teachers is typically ignored, and often inhibited, by the school's formal organization; consequently, teachers are frequently isolated from their colleagues. This isolation, combined with the dearth of supervisory support, drastically impedes the professional development of even the most conscientious and dedicated teachers. Despite a paucity of research, evidence indicates that systems of intervisitation or colleague consultation seem promising and are valued by teachers.

Developing colleagueship in schools where it has been long absent will not be an easy task. The long accumulated inertia in schools characterized by secluded classrooms that are the private domains of individual teachers, by busy schedules and the time-consuming preparation required for effective teaching, and by organizations emphasizing formalization and stratification will require time and concerted effort to overcome. The counterproductive, adversarial competition between administration and teacher organizations, and among some teachers themselves, poses difficult obstacles to the development of active colleagueship in supervision. Organizational change requiring committed and patient leadership is needed to alter existing interaction patterns in schools. Colleagueship in supervision will necessarily lead to an altered, yet crucial role for instructional supervisors.

It is clear that if supervision is to be improved its base must be broadened. It is simply not possible for those who carry the formal title of supervisor to have any direct impact on large numbers of teachers. Over the years, despite best efforts, instructional supervision has re-

mained a fragmented activity. It is often a response to a crisis or, in other cases, a routine of occasional visits to classrooms. On other occasions a major school or systemwide effort at instructional improvement is undertaken, only to terminate when the impetus or funding of the effort ceases.

The critical need for instructional supervision and the corresponding lack of formal supervision (some school systems report supervisor-teacher ratios of 1 to 200 or more) suggest a new role for supervisors. They might become "orchestrators" of instructional supervision, persons who serve a broker role in the school system, identifying needs and then selecting and recruiting from throughout the school or school system those persons who can contribute to specific tasks of instructional improvement. In so doing, formal supervision does not lose its tie with organizational goals, nor does it set aside its own authority base. On the contrary, it uses the authority of position as well as knowledge to identify teachers and others who possess experience and expertise uniquely appropriate to a particular task. Such persons may temporarily become members of instructional supervision teams, organized for the completion of a particular task, or may contribute a special ability over an extended period of time.

Such a concept recognizes the rich resources available among experienced teachers and helps create the kind of colleagueship that characterizes professions. We strongly endorse the use of colleagues as resources for professional development, but also recognize that the characteristics of schools make such colleagueship difficult. It is necessary that someone in the school system create a process for developing colleagueship, give it organizational approval, and ensure that it is directed both to the immediate, personal needs of teachers as well as to the long range goals of the organization. This is a uniquely appropriate role for the instructional supervisor.

This role may call for new skills, for it requires supervisors to work well not only with individual teachers but with groups of teachers and instructional supervisory teams. In becoming an orchestrator of instructional improvement resources, a supervisor does not give up authority, but rather makes more effective use of it. Formal resources are inadequate for the task at hand, while at the same time rich resources throughout the school system and in the broader school community remain untapped. In identifying and organizing such resources, the process of instructional supervision is made more powerful. In addition, the use of the rich talents of others in a school system—especially teachers—contributes to colleagueship and a heightened sense of cooperation and professionalism.

Topic C

Human Skills in Supervision

SUPERVISORS ARE LEADERS. THEY SPEND A LARGE PORTION OF their time working with people, and their critical tasks—helping improve instruction, curriculum development, and staff development—require the knowledge of group dynamics and organizational development, and the ability to apply interpersonal skills. Many writings on supervision describe supervisors as "helping," "facilitating," "serving," and "working" with teachers and other staff members. Most general supervision textbooks stress the importance of studying human skills in working with individuals and groups.

Glickman, in "The Supervisor's Challenge: Changing the Teacher's Work Environment," cites research on effective schools and concludes that "every major research study on effective schools has noted (the vital necessity for) the organizational phenomenon of collective action, agreed-upon purpose, and belief in attainment." He then identifies four factors commonly found in the work environment of schools which deny the conditions necessary for effectiveness. Finally, he offers practical suggestions for removing the obstacles and helping teachers move from "individualistic and fragmented actions toward a cause beyond oneself." Practitioners will want to analyze their behaviors to see if they have been responsible for creating the obstacles Glickman has identified and to consider implementing his suggestions for removing the obstacles they find.

In "Authentic Supervision Reconciles the Irreconcilables," Pajak and Seyfarth define leader authenticity and present a strategy "derived from Gestalt psychology that may be useful to supervisors who wish to improve their authenticity, particularly the expression of self over role." After warning educators against introjecting what they call "immobilizing 'shoulds'," they present a perspective that supervisors might find helpful in recognizing and dealing with the internal conflicts caused by irreconcilable "shoulds." Although they recognize that there are no hard and fast rules governing exchanges between teachers and supervisors, they present four steps for supervisors to use in developing more authentic contact with teachers. They also suggest that teachers can take these steps to establish more authentic contact with their students and others. Students of supervision will find this to be an interesting point of view in the area of human skills.

Saphier and King claim that the culture of the school is the foundation for school improvement in "Good Seeds Grow in Strong Cultures." They urge school leaders and staff members to give attention to 12 norms of school culture that affect school improvement. Culture builders, the authors claim, "bring an ever-present awareness of the 12 norms to everything they do in the conduct of daily business." In discussing how strong school cultures are built, the authors draw on Sergiovanni's article "Leadership and Excellence in Schooling." The entire Sergiovanni article is in Topic A.

Miller and Lieberman capture some of the flavor of the job of the principal in "School Leadership Between the Cracks." They describe a week in the life of an assistant principal who shared responsibilities for school leadership and administration in a midwestern high school of 1,700 students. They conclude that "educational leadership happens, when it happens at all, within the cracks and around the edges of the job." They find that a huge gap exists between what the role of the principal is supposed to be and what it actually is. Acknowledging the world of "is" and helping build toward the world of "ought" presents a challenge for students of supervision and practitioners alike.

As readers look more closely at the articles, the following questions and activities may stimulate discussion and action.

1. In your present position (or the one for which you are preparing), identify specific actions you can take to change the work environment for teachers more nearly to that urged by Glickman.

2. Reflect upon your present position and apply the steps suggested by Pajak and Seyfarth for use by supervisors in developing more authentic contact with teachers. When you have completed step four, discuss with a colleague *how you prevent yourself* from doing those things you want to do and outline a plan for changing the situation.

3. Develop an instrument to assess school culture based on the 12 norms identified in the Saphier and King article. Test the instrument with a sample of staff members in the school in which you work.

4. Shadow a principal in your school district for a day (or longer if possible) and compare your findings with those in the article by Miller and Lieberman. Look carefully for those moments where there might have been opportunities for "educational leadership" as Miller and Lieberman describe it. Describe how these "lost opportunities" might have been captured.

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The Supervisor's Challenge: Changing the Teacher's Work Environment

Carl D. Glickman

To create a professional environment in schools, supervisors need to provide more opportunities for teachers to make choices, observe each other, discuss their work, and help beginning teachers ease into their responsibilities.

Many state legislatures are in the midst of proposing or implementing such reforms as higher educational standards for prospective teachers; salaries that are competitive with industry; 11-month contracts; career ladders; and incentives, such as grants and loans, to attract outstanding students to teaching.

All of these reforms are worthy in that they strive to reward teachers with career advancement and higher salaries and status. Yet simply to attract and reward capable and sensitive teachers by improving external conditions will not be enough. Those of us who are familiar with the everyday life of teachers and schools know that unless the "place called school" becomes a professional work environment for teachers, we probably will not improve the situation. We will continue to lose good teachers, and those who remain will still have little incentive to excel.

Supervisors, department heads, instructional lead teachers, and principals must take on the difficult task of changing those characteristics of the teaching environment that stifle the improvement of instruction. Their best resource in this effort is our rapidly accumulating knowledge about the characteristics of schools that are effective.

A Cause Beyond Oneself

The research on effective schools is well known. Instead of recapitulating the specific findings of each study, let's look at what they have in common. They all refer to a particular type of social organization. Edmonds (1979) referred to a climate of expectations; Brookover (1979) to teachers' expectations that students can learn; Little (1982) to collective action and common terminology used by teachers in discussing problems; Goodlad (1983) to goal participation and agreement; and Rutter and others (1979) to a "concept of ethos . . . the well-nigh universal tendency for individuals in common circumstances to form social groups with their own rules, values, and standards of behavior" (p. 184). Where an ethos was developed around a clear educational purpose, an effective school emerged.

It should be emphasized that the more successful schools are not unduly regimented. Rather, they are characterized by good morale and the routine of people working harmoniously together as part of an efficient sytem that offers both supervision and support to teachers (Rutter and others, 1979, p. 184).

Carl D. Glickman is Associate Professor, College of Education, the University of Georgia, Athens.

Every major research study on effective schools has noted the organizational phenomenon of collective action, agreed-upon purpose, and belief in attainment. I call these manifestations of ethos "a cause beyond oneself" (Glickman, in press). Teachers of effective schools see themselves as part of the total action with an agreed-upon purpose and belief that as a group they can attain their goals. Similarly, research on ineffective schools has noted the lack of a common purpose, finding that teachers in such schools see themselves as isolated individuals, "islands unto themselves," concerned with their own students within their own four walls. To improve instruction we must give constant attention to bringing teachers together to work on common instructional concerns.

Why Most Schools Do Not Improve

There are four factors in the work environment that prevent this from happening: (1) inverse beginner responsibilities, (2) invisibility and isolation, (3) lack of professional dialogue, and (4) restricted choice.

Inverse Beginner Responsibilities. We educators tend to keep the embarrassment of blatant unprofessionalism to ourselves. The truth is that we usually give our newest and least experienced teachers the most difficult jobs in our schools. As a principal and consultant to schools, I am aware that when a teacher resigns, the remaining teachers often descend upon the classroom and remove any materials, equipment, or furniture of value and replace them with their discards. The new teacher enters a classroom equipped with leftovers. In addition, administrators often place the most difficult and lowest achieving students

with the new teacher. New teachers, therefore, are left with the most demanding students in the most poorly supplied classrooms. Meanwhile, teachers with experience have the inverse situation—the least demanding students in the best equipped classrooms. The message to beginning teachers is, "Welcome to teaching. Let's see if you can make it." This professional environment is hardly conducive to support and sharing. If new teachers do make it, they pass their initiation rites onto the next group of beginners.

Invisibility and Isolation. Although public schools supposedly have evolved from the one-room schoolhouse, it still exists every couple of yards down the school corridor. Teachers have their own students, their own rooms, their own instructional programs. Basically, teachers can close off their classrooms from other teachers and supervisors. Other than being observed a few times a year, most teachers are not viewed in the act of teaching, nor do they view others. It is remarkable that teachers can work in the same building on the same common task (instruction) with the same clientele (students) with virtually no knowledge of what other teachers are doing. How can teachers possibly know how they are complementing, reinforcing, or negating each other's instruction?

Lack of Professional Dialogue. Since most classrooms are closed from one another, teachers do not engage in much professional dialogue. DeSanctis and Blumberg (1979) found that professional talk among teachers usually lasts less than two minutes. Teachers have few opportunities to speak with each other, and when they do, it is usually when passing in the hall or during a break in the teachers lounge. Such dialogue is frequently of a social and nonprofessional nature. Teachers spend an overwhelming amount of their time speaking to students and socializing with each other but not solving instructional problems. Rarely do supervisors engage teachers in mutual problem solving.

Restricted Choice. Finally, teachers have little choice over their working lives, which are often bureaucratic and restricted (Lortie, 1975). Schedules are set, teachers are told what they will teach and when they will teach. Minimum competencies, mandated curriculums, and externally developed policies restrict their choices. Goodlad (1984) found that teachers have virtually no involvement in schoolwide decisions.

Reviewing some of the obstacles of instructional improvement, Goodlad made pertinent observations about the work environment of teachers:

> In general the practicing teacher—to the degree we can generalize from our findings—functions in a context where the beliefs and expectations are those of a professional but where the realities tend to constrain, likening actual practice more to a trade. It undoubtedly is too late to turn back the clock with respect to embellishing teaching with the trappings of a profession. But a question arises as to whether the circumstances of teaching can be made conducive to developing in all teachers the behavior a profession entails. By its very nature a profession involves both considerable autonomy in decision making and

knowledge and skills developed before entry and then honed in practice. The teachers in our sample, on the whole, went into teaching because of these inherent professional values. However, they encountered in school many realities not conducive to professional growth (Goodlad, 1984, pp. 193–194).

At last, we have the real challenge to supervisors. To improve instruction, we must reshape the work environment of teachers into one that is conducive to reflective and collective dialogue among staff members who are given power to act upon their decisions.

Removing the Obstacles

All supervisors must assess their own school situation, staff members, and community to determine how to approach the problem. I offer the following suggestions for moving teachers from individualistic and fragmented actions toward a "cause beyond oneself."

Gradually increase the responsibilities of beginning teachers:

- Plan with experienced teachers ways to make the first year of teaching a situation of lessened responsibilities, involving peer support and help in easing the beginner into the profession.
- Plan a "buddy system" of matching experienced teachers with beginning teachers so that the beginner has someone to turn to for information and help.

Increase visibility among teachers:

- Encourage teachers to visit each other and, therefore, find out what others are doing. The visited teacher can ask the visiting teacher to observe and give feedback on particular classroom concerns.
- Hold after-school meetings in different rooms where teachers are asked to defend the what and how of their instruction. Barth (1980) wrote of how teachers in his school presented their instructional plans to each other. They continued the intellectual task of asking, "In which ways does my teaching support yours, and in which ways does my teaching contradict what you are trying to do?" Teachers can see more easily where the curriculum inconsistencies exist from teacher to teacher and grade level to grade level.

Increase professional dialogue among teachers:

"The truth is that we usually give our newest and least experienced teachers the most difficult jobs in our schools."

- Provide time for professional talk among teachers during faculty meetings. Give teachers time to propose plans for what *they can do* to change current problems. Keep talk focused on actions the staff can control.
- Invite teachers to help interview teacher candidates. This involvement not only gives recognition to their experience but also enables them to examine and explain the workings of their school to outsiders. The need to articulate school purpose becomes apparent when a candidate asks, "What is it like to teach here?"

Increase teachers' professional choices:

- Encourage teachers to work in groups where they can control part of their own teaching schedules, materials, and curriculum. Teachers across grades or subjects can be grouped together and given complete responsibility for planning some activities for the year. Whether the work involves a special extracurricular project, a study group on discipline, or curriculum changes, the power to implement as a group can help build collective action.
- Continually ask staff members to think about an active philosophy, not a theoretical philosophy. What is the purpose of the school? Is the purpose academic achievement on tests or is it other ways of knowing? Do we value memorization and recitation or experimentation and inquisitiveness? Do we want students to become aware of self-values? Do we want conformity or autonomy? Or do we want to do everything? These are not pie-in-the-sky questions; the research on effective schools has shown that faculty members in effective schools clearly know their priorities no matter how narrow or broad they may be, and that the use of their human and fiscal energy clearly reflects those priorities. Clarity does not occur by itself. It occurs when we ask teachers, "What do you want our students to become? What do you do in your class? What do we do in the school that either supports or negates those goals?"

The challenge is clear: supervisors have to move forcefully to eliminate factors in the school environment that impede improvement and replace them with collective action—"a cause beyond oneself."□

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Authentic Supervision Reconciles the Irreconcilables

Supervisors will be effective if their behavior with teachers is based not on what they think others expect of them, but on their own genuine wants and needs.

EDWARD F. PAJAK AND JOHN T. SEYFARTH

The concept of "authenticity" has emerged periodically in the educational literature since Halpin's (1966) identification of authentic or genuine behavior as a variable closely associated with an open climate in educational organizations. In open-climate schools the behavior of teachers and principals seems purposeful and real, Halpin suggests, while in closed-climate schools behavior tends to be overly determined by role and appears almost ritualistic.

Most recently, leader authenticity has been defined as involving three aspects of behavior:

—accepting responsibility for one's actions, outcomes, and mistakes

—being nonmanipulative of subordinates

—demonstrating an expression of self over role (Henderson and Hoy, 1982).

This article presents a strategy derived from Gestalt psychology that may be useful to supervisors who wish to improve their authenticity, particularly the expression of self over role.

Supervisors report that they experience the most satisfaction from their work when they are able to help teachers solve problems encountered in teaching. For example, a supervisor friend of ours told us about her experience with a first-grade teacher who asked for help. The teacher was distressed by classroom management problems that she feared would affect her end-of-year ratings by her principal. Her anxiety about the ratings hindered her efforts to manage her class, which further increased her anxiety.

The supervisor observed her class and made some simple suggestions ("Lower your voice. Attend to one thing at a time."), which the teacher tried and found effective. The supervisor related with delight the teacher's expressions of appreciation after a day that had gone smoothly as a result of these suggestions.

Unfortunately, supervisors also report that they don't very often have the chance to experience the lift that comes from helping a teacher with a real problem. There are obvious reasons for this, such as the fact that supervisors are often responsible for so many teachers that making the rounds to visit each teacher once a year consumes most of their time. Paperwork is another thief that steals time from working with teachers. The conditions that hamper supervisors in their work make it all the more imperative that supervisors improve the quality of their interactions with teachers.

Edward F. Pajak is Assistant Professor of Curriculum and Supervision, The University of Georgia, Athens; John T. Seyfarth is Associate Professor of Administration and Supervision, Virginia Commonwealth University, Richmond.

Half of Reality

For some time the practice of supervision has focused on ways of observing, reporting, and interpreting behavior of teachers and students. The teaching act has been broken down into component parts, and the parts analyzed for their effect on learning. Progress has been made through this approach, and it remains the best way we know for helping teachers accomplish what they want to do in the classroom. Yet, as beneficial as this objective, analytical approach to supervision may be, it represents only half of reality. The whole of experience, or Gestalt, includes the internal worlds of teachers and supervisors, feelings as well as facts.

Most supervision texts include strategies for the supervisor to use in dealing with teachers' feelings, such as acknowledging, paraphrasing, and reflecting—techniques borrowed from the work of psychologist Carl Rogers, who recommends a client-centered approach to therapy. While fine and good, these techniques overlook an important dimension of the teacher-supervisor relationship, namely, the feelings of the supervisor, which are the key to authenticity. We believe that the work of Fritz Perls (1978) and other Gestalt psychologists can provide useful insights and tools for dealing with this neglected, though important, area.

Gestalt psychologists believe that to improve the quality of our personal and professional relationships (by being more authentic), it is necessary to become more aware of and responsive to our own psychological needs. The conceptual framework developed by the Gestalt school of psychology may be useful for helping supervisors and teachers develop more effective interpersonal skills. Many of the terms used in the material that follows are borrowed from Herman and Korenich (1977). Although their book, *Authentic Management*, is written specifically for managers, it has suitable applications to education.

According to Gestalt psychology, we all rely on a process called homeostasis, or self-regulation, for maintaining our equilibrium when interacting with the environment. When the homeostatic process functions properly, our sensory systems orient us to the environment, letting us know what we need and want at any particular moment. Alternately, our motor systems enable us to manipulate the environment in such a way that we satisfy appropriate needs, thereby restoring balance.

If the homeostatic process is in some way disturbed, however, either because we are unable to sense our dominant needs or are unable to manipulate the environment in order to satisfy them, our behavior will be disorganized and ineffective. This homeostatic process can be disturbed when the environment overwhelmingly impinges on our internal worlds. A major contributor to such disturbances, according to Herman and Korenich, is the introjection of "shoulds," or the swallowing whole of undigested values, attitudes, opinions, feelings, and behaviors, as opposed to selecting and gradually assimilating them or examining them to determine whether they fit comfortably with what we already believe and do. A supervisor who accepts the attitudes and beliefs of others uncritically, for example, will experience some degree of mental conflict arising from the opposing expectations that others have for the role of supervisor. When these introjects contradict one another, the individual may experience internal conflict severe enough to prevent effective action.

A supervisor "should" attend carefully to paperwork in the office, for instance, *and* the supervisor "should" observe as many teachers in the field as possible. Time constraints make the adequate performance of both responsibilities problematic. The typical and ineffective manner of dealing with the dilemma is to do one while feeling terribly guilty about not doing the other.

Research and prevailing opinions on effective supervisory behavior can themselves be sources of conflicting "shoulds." A supervisor who is shy or introspective may try at considerable mental cost to appear convivial and outgoing, in response to a prevailing notion of effective supervisory behavior. Similarly, a talkative, dominant individual, advised that effective supervision requires a less active style, may try to conform to this "should" even though it contradicts his or her natural inclination. While some successful supervisors are gregarious, others, though equally successful, are quiet and introspective. What successful supervisors share in common, we suggest, is authenticity, not a particular style or pattern of behavior.

"What successful supervisors share in common is authenticity, not a particular style or pattern of behavior."

"People often avoid contact by engaging in intellectualizing and self-neutralization when they are uncomfortable acknowledging and expressing their own feelings and desires."

Immobilizing "Shoulds"

A pair of immobilizing "shoulds" seems to arise for the supervisor, as a more specific example, from Blumberg's findings that teachers believe they acquire greater insight from and generally evaluate more positively those supervisors who exhibit *both* direct and indirect behaviors:

> Teachers seemed to be saying that the more their supervisor came across in an indirect manner the more they were able to get insight into themselves, both into their teacher role and as a person. . . . It appeared that the way in which the supervisor could be most helpful on this level of operation was to combine a relatively heavy emphasis on direct behavior with . . . indirect behavior. . . . This finding suggests that hearing about oneself is probably most productive not only when the supervisor (or other helping agent) questions, listens, and reflects back what he hears, but also when he does a bit of telling, gives feedback (Blumberg, 1980, p. 67).

While this makes great sense, in practice the supervisor is left uncertain about which behavior, direct or indirect, is most appropriate for a particular situation.

The central immobilizing pair of "shoulds" supervisors face in their interactions with teachers, however, originate with the conflicting role demands of being both helper and evaluator. We agree with Blumberg's (1980) advice that it is the supervisor's responsibility to acknowledge the existence of these conflicting "shoulds," to deal with his or her own "feeling about having to perform the dual function" (p. 170), and to honestly confront the teacher with the reality of the situation, *before* discussing such things as what type of data will be collected during the observation, how, and when. What is obviously needed is some method by which the supervisor can first resolve the conflict in his or her own mind.

Our purpose in this article is not simply to warn educators against introjecting "shoulds"; to do so would be to commit the sin we are railing against. Rather, we wish to present a perspective that may enable supervisors to recognize and deal with the internal conflicts caused by irreconcilable "shoulds." This, we believe, will be a useful step in helping supervisors to purposefully choose what they want to do, how they want to do it, and to recognize the ways by which they may be unnecessarily preventing themselves from getting what they want.

Establishing Contact with Teachers

Authentic interaction between two people is characterized by a quality Herman and Korenich call contact. In order for contact to occur, they say, each individual must first establish and maintain contact with his or her personal feelings, needs, and wants, and be willing to make these known. When contact exists the conversation between people is usually characterized by liveliness, excitement, and presentness. Lack of contact is evident when the topic of conversation is other people or past and future events. People often avoid contact with one another, according to Herman and Korenich, by engaging in intellectualizing and self-neutralization when they are uncomfortable acknowledging and expressing their own feelings and desires.

Much of the talk between supervisor and teacher can be classified as intellectualizing. Supervisors are aware that teachers do not welcome direct criticism of their teaching, yet they feel constrained out of a sense of duty to inform teachers about obvious flaws in their methods. Intellectualizing provides a convenient escape from this dilemma. Descriptions of problem areas may be couched in abstract philosophical statements or obscured with technical jargon, which diminishes the likelihood that a teacher will get defensive, but increases the chances that the teacher will fail to understand exactly what the supervisor is criticizing.

Contact, it seems, can also be avoided by simply being oblique. Many supervisors, for example, find it difficult to tell a teacher that he or she made a mistake during a lesson. Whether the mistake involves mispronouncing or misspelling a word, applying a geometric theorem, or explaining a chemical formula makes little difference. The dilemma arises from the supervisor's conflicting "shoulds." The supervisor "should" call the teacher's attention to the error so that it won't be repeated; the supervisor "should" also be supportive and nonjudgmental. This can be embarrassing for the supervisor, and may result in a vague message. Some supervisors tell us that they make it a point to use a mispronounced word correctly in their conversation with the teacher during the post-conference, hoping that the teacher will note the discrepancy and make the correction. Whether that happens is open to question, since many words in English have various pronunciations and a teacher may consider the supervisor's pronunciation an acceptable alternative. It's also possible that the teacher considers the supervisor's pronunciation wrong, but refrains from correcting him or her out of politeness. Or, the teacher simply might not notice.

Another way of avoiding contact is with the device called self-neutralization, which Herman and Korenich define as diluting one's message in an effort to appear considerate, supportive, or objective. Supervisors hedge criticism, in this case, with ready-made excuses. The supervisor might note that students did not seem to be motivated by a lesson, for instance, and then immediately add something like, "of course it's always difficult to hold students' interest on a Monday morning." Supervisors who dilute their messages to teachers in this way can come across as unclear, and they leave teachers confused about how concerned they really ought to be about the problem and whether or not they are supposed to correct it.

A common variation is to counter each criticism of a teacher's perform-

"While authentic supervisors are more than willing to attend to teachers' feelings, they are unwilling to compromise their own feelings in the process."

ance with a positive feature of the lesson. While this practice may ease the teacher's discomfort, the teacher may also fail to grasp the significance of his or her shortcomings. The impression may be generated that, all things considered, the lesson was pretty well balanced, when the supervisor actually wanted to convey serious misgivings.

The point is not that supervisors ought to be inconsiderate or unsupportive in their dealings with teachers, or that they should discard objectivity. Rather, we are suggesting that being overly concerned about these issues (introjects relating to how effective supervisors "should" behave) can actually interfere with communication. Too much indirectness can result in a loss of clarity. Being direct is not only clearer, it is also frequently more humane.

Models of supervision typically assume that the teacher and supervisor are making contact with each other, that both teacher and supervisor are already operating in the here and now. Most assume also that supervisors are closely in touch with their own feelings. Too often, we believe, teachers and supervisors do or say what they think they *should* do or say rather than what really needs to be done or said. The teacher, for example, says what he or she believes the supervisor thinks "should" be said during a conference, or teaches the way he or she believes the supervisor thinks teaching "should" be done. Or, both teacher and supervisor may try to behave consistently with an abstract conception (introject) of how people in their respective roles "should" behave.

There are no hard and fast rules governing exchanges between teachers and supervisors. These exchanges, however, will be more effective if they are authentic. A first step in becoming aware of one's authentic feelings, needs, and wants is to recognize the "shoulds" that prevent real contact. The following strategy is an adaptation of a technique originated by Herman and Korenich (1977). Although we present these steps for supervisors to use in developing more authentic contact with teachers, teachers can also use them to establish more authentic contact with their students and others:

1. Identify and list the most important "shoulds" about your job as supervisor (such as, a supervisor "should" work with individual teachers, "should" involve teachers in decision making, "should" not overstep bounds by dealing with issues that are the principal's province, and so on).

2. Describe what you would do if you could follow your natural inclination, if you didn't have that "should." This can be something that you would like to do.

3. Decide, as honestly as you can, where each of the "shoulds" originates, whether from your own superordinate, an inservice workshop, a textbook, your parents, or school policy. Ask yourself to what extent each "should" is a real constraint, and to what extent it is self-imposed. Ask yourself, also, what specifically would happen if you failed to observe that "should."

4. (This may be most difficult at first.) Identify what is in it for you to keep things as they are instead of doing things differently. Finally, try to determine exactly *how you prevent yourself* from doing those things that you really want to do.

This strategy for identifying your "shoulds" and your "wants" only begins to establish contact with others. Authentic contact requires a constant, purposeful shuttling of one's attention between the internal world of one's own feelings and the external environment, which includes the feelings of others as well as objective facts. Contact can best be facilitated by asking three questions: What am I doing right now? What am I feeling right now? What do I *really* want right now from this situation?

As long as contact is maintained, supervisors are prepared to accept responsibility for what they say, including the risk of offending or angering others. This does not mean running roughshod over the feelings of others or discarding empathy. Rather, authentic supervisors respect feelings to such an extent they consider their own feelings as being as important as the teachers'. While authentic supervisors are more than willing to attend to teachers' feelings, they are unwilling to entirely compromise their own feelings in the process.

In summary, we propose that schools as organizations are sometimes less effective than they might be because of breakdowns in homeostatic processes among the people involved. Individual teachers, supervisors, and administrators can become more authentic if they clearly identify and successfully satisfy their own needs and wants with respect to others in the school. This can be accomplished by increasing their awareness of what is happening "right now" both internally and externally, and then acting in an honest way that gets them what they want or need for that situation, and encouraging others to do the same.□

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Good Seeds Grow in Strong Cultures

JON SAPHIER AND MATTHEW KING

Regardless of the focus of particular change efforts, schools need to nurture and build on the cultural norms that contribute to growth.

School improvement emerges from the confluence of four elements: the strengthening of teachers' skills, the systematic renovation of curriculum, the improvement of the organization, and the involvement of parents and citizens in responsible school-community partnerships. Underlying all four strands, however, is a school culture that either energizes or undermines them. Essentially, the culture of the school is the foundation for school improvement, a view summarized by Purkey and Smith (1982):

> We have argued that an academically effective school is distinguished by its culture: a structure, process, and climate of values and norms that channel staff and students in the direction of successful teaching and learning. . . The logic of the cultural model is such that it points to increasing the organizational effectiveness of a school building and is neither grade-level nor curriculum specific (p. 68).

If certain norms of school culture are strong, improvements in instruction will be significant, continuous, and widespread; if these norms are weak, improvements will be at best infrequent, random, and slow. They will then depend on the unsupported energies of hungry self-starters and be confined to individual classrooms over short periods of time. The best workshops or ideas brought in from the outside will have little effect. In short, good seeds will not grow in weak cultures.

Giving shape and direction to a school's culture should be a clear, articulated vision of what the school stands for, a vision that embodies core values and purposes. Examples of core values might be community building, problem-solving skills, or effective communication. These value commitments vary from community to community; what is important for school leaders to know is the role of values as the fuel of school improvement. If core values are the fuel, then school culture is the engine.

The 12 Norms of School Culture

The cultural norms listed in Figure 1 can be supported where they exist and built where they do not by leaders and staff. The degree to which these norms

Figure 1. The Cultural Norms That Affect School Improvement.

1. Collegiality
2. Experimentation
3. High expectations
4. Trust and confidence
5. Tangible support
6. Reaching out to the knowledge bases
7. Appreciation and recognition
8. Caring, celebration, and humor
9. Involvement in decision making
10. Protection of what's important
11. Traditions
12. Honest, open communication

Jon Saphier is President, Research for Better Teaching, and Matthew King is Superintendent and Principal, Carlisle Public Schools, Carlisle, Massachusetts.

are strong makes a huge difference in the ability of school improvement activities to have a lasting, or even any, effect. Building these norms depends equally on teachers' will and commitment since good leadership alone cannot make them strong; but without such leadership, culture cannot begin to grow or be expected to endure.

While we discuss these norms from the teacher's point of view, because teachers are culture shapers, it is important to bear in mind that there is a student culture as well. The same 12 norms apply to the culture of the school for students, but they are a direct reflection of what adults are capable of modeling among themselves.

Wherever these norms exist, they reside in teachers' and administrators' beliefs and show up in their actions. The following are hypothetical statements that represent what teachers believe and how they behave—not idle words in philosophy documents, but real actions rooted in beliefs of most of the faculty in a school with a strong culture.

1. Collegiality.

"In this school the professional staff help each other. We have similar challenges and needs and different talents and knowledge. When I was having problems with cliquishness among the girls, I brought it up at lunch and got some excellent ideas from the other teachers. I wasn't afraid to bring it up because I know people here are on my side. If someone thinks they hear a strange noise coming from my room, they'll stop to check it out. It isn't everyone for themselves and just mind your own business.

"I think these people are darn good at what they do. I know I can learn from them and believe I have things to offer in return. Sometimes we evaluate and develop curriculum and plan special projects together, like Esther, Lorrie, and Allen doing the one-week SCIS workshop for all of us this summer. Teaching each other sometimes requires more time to plan than 'expert-led' workshops, but it allows us to work together on a significant project. Similarly our study groups—organized around topics such as cooperative learning, thinking skills, and involving senior citizens—allow us to exchange ideas. In this school we resist the notion that teaching is our 'second most private activity.'"

2. Experimentation

"Teaching is an intellectually exciting activity. Around here we are encouraged by administrators and colleagues to experiment with new ideas and techniques because that is how teachers and schools improve. And we can drop experiments that do not work and be rewarded for having tried. We are always looking for more effective ways of teaching. Just last year we published 'Opening Classroom Doors,' a booklet with short descriptions of new ideas tried in classrooms. One teacher, for example, shared how she used jigsaw activities to do cooperative learning in social studies."

3. High Expectations

"In this school the teachers and administrators are held accountable for high performance through regular evaluations. We are specifically expected to practice collegiality and to experiment with new ideas. We are rewarded when we do and sanctioned if we don't. Our continued professional development is highly valued by the school community. While we often feel under pressure to excel, we thrive on being part of a dynamic organization."

4. Trust and Confidence

"Administrators and parents trust my professional judgment and commitment to improvement—no matter how effective I already am—and show confidence in my ability to carry out my professional development and to design instructional activities. We are encouraged to bring new ideas into our classes and given discretion with budgets for instructional materials."

5. Tangible Support

"When I need help to improve my instruction, people extend themselves to help me with both time and resources. Indeed, when resources become scarce, professional development remains a priority. Around here people believe the professional knowledge and skills of teachers are so important to good schooling that developing human resources is a high and continued commitment. Despite financial constraints we still have sabbaticals, summer curriculum workshops, and funds to attend professional conferences."

Reaching Out to the Knowledge Base

"Cultures are built through the everyday business of school life. It is the way business is handled that both forms and reflects the culture."

These first five norms have complicated and dependent relationships with one another. Little (1981) has written at length about the first three norms in her studies of "good schools." In these schools, leaders have high expectations that teachers will be collegial and experiment in their teaching. Rather than being dependent on fortuitous chemistry in a group (though it helps), collegiality is an expectation that is explicitly stated by the leader, rewarded when it happens, and sanctioned when it doesn't. Barth (1984) goes so far as to argue that "the nature of the relationships among the adults who inhabit a school has more to do with the school's quality and character, and with the accomplishment of its pupils, than any other factor." The importance of leaders being explicit about what they want and pressing for it is supported by recent work on school change (Loucks, 1983). While leaders need to be direct about what they expect, excellent leaders allow people plenty of latitude in choosing how they realize it:

> My interpretation of the school effectiveness literature leads me to believe that these schools are both tightly coupled and loosely coupled, an observation noted as well by Peters and Waterman in their studies of America's best run corporations. There exists in excellent schools a strong culture and clear sense of purpose, which defines the general thrust and nature of life for their inhabitants. At the same time, a great deal of freedom is given to teachers and others as to how these essential core values are to be honored and realized. This combination of tight structure around clear and explicit themes, which represent the core of the school's culture, and of autonomy for people to pursue these themes in ways that make sense to them, may well be a key reason for their success (Sergiovanni, 1984, p. 13).

Thus, leaders might require teachers to work on expanding their repertoires of teaching skills but leave the choice of how and what up to them. Simultaneously, though, these leaders would offer tangible support—for example, one release afternoon a month—and provide a menu of options such as in-house study groups, outside speakers, tuition for attending workshops or courses, or support for individual projects.

6. Reaching Out to the Knowledge Base

"There are generic knowledge bases about teaching skills and how students learn; about teaching methods in particular areas; about young people's cognitive and affective development; and about each of the academic disciplines. These knowledge bases are practical, accessible, and very large. Teachers and supervisors are continually reaching out to them to improve their teaching and supervision."

There are two features of this norm we would like to highlight. The first is its aggressively curious nature. There is always more to learn, and we can respond to that understanding with energy and reach out beyond our classes or our buildings, sharing journals, attending workshops, visiting each other and other sites. A principal could model this by inviting several teachers to visit another school with him or her. Such an activity might build collegiality by bringing together teachers who don't normally work together. Indeed, as much may happen during the ride together and over lunch as happens during the visit itself.

The second feature of this norm is the reality and usefulness of these knowledge bases. The erroneous belief that there is no knowledge base about teaching limits any vision of teacher improvement. It is also isolating because in the absence of knowledge, good teaching must be intuitive; if "goodness" is inborn and intuitive, then having problems is a sign of inadequacy or too little of the "right stuff." This syndrome discourages talking about one's teaching, especially one's problems. Furthermore, if good teaching is intuitive and there's no knowledge base, what's the good of working on improvement?

But the knowledge base on teaching is very real and expanding all the time. It tells us that there are certain things that all teachers do, regardless of age group, grade, or subject. It tells us the situations or missions that all teachers have to deal with in one way or another. It also tells us what our options are for dealing with each area of teaching, and that matching behaviors and techniques to specific students is the name of the game. In some cases, it even gives us guidelines for how to go about the matching.

Teachers make decisions and act to deal with numerous aspects of their instruction and relationships with students. For example, experts agree that there are dozens of ways to gain and maintain attention, several kinds of objectives (Saphier and Gower, 1982), and over 20 models of teaching (Joyce and Weil, 1980). Because there are many ways to deal with each of the myriad of teaching tasks, skillful teaching involves continually broadening one's repertoire in each area and picking from it appropriately to match particular students and curriculums. The knowledge base about teaching is the available repertoire of moves and patterns of action in any area, available for anyone to learn, to refine, and to do skillfully.

"Giving shape and direction to a school's culture should be a clear, articulated vision of what the school stands for, a vision that embodies core values and purposes."

Caring, Celebration, and Humor

Consider another knowledge base. Each subject has, in addition to the formal knowledge of its discipline, a how-to knowledge base of teaching methods and materials. Where it is the norm to consult the knowledge bases, teachers are reaching to learn new methods and examine the latest materials and not to find the single best ones, because there are no best ones. They seek to expand their repertoires so as to expand their capacity to reach students with appropriate instruction.

This particular norm, reaching out to the knowledge bases, is one of the least understood and most neglected. It is also one of the most powerful for rejuvenating an ailing school culture. In schools where the knowledge bases are cultivated, a common language for talking about instruction emerges. This language reduces the isolation commonly experienced by teachers (Lortie, 1972).

7. Appreciation and Recognition

"Good teaching is honored in this school and community. The other day I found a short note from the principal in my mailbox: 'When Todd and Charley were rough-housing in the hall you spoke to them promptly and firmly yet treated them maturely by explaining the whys of your intervention. It really makes our grown-up talk about respect mean something when teachers take responsibility for all kids the way you do.' He just observed that incident for a minute, yet took the time to give me feedback. (Somehow it had more impact in writing, too.) Things like that make me feel there is a real value placed on what I do with students. I am recognized for my efforts and achievements in the classroom and the school."

There are many ways this message can be sent: teacher recognition as a regular feature of school committee meetings; PTA luncheons at the beginning and end of the year for faculty and staff; short notes in teachers' mailboxes from a principal who notes something praiseworthy during a walk around the building; perhaps even superior service awards written up each year in local newspapers with stipends given annually to a few teachers. Of course, underlying these efforts should be a pay scale that is at least competitive with neighboring districts.

8. Caring, Celebration, and Humor

"There are quite a number of occasions when we show our caring for each other and awareness of significant events in each others' lives, as well as celebrating benchmarks in the life of the school. Estelle, for example, somehow arranges a 15-minute party with some goody for every faculty member's birthday in her building. We often have these short but satisfying little gatherings in the teacher's room before the kids come in. There is a lot of humor and laughing together in this school."

9. Involvement in Decision Making

"I am included in certain meaningful decision-making processes in this school, especially when they directly affect me or my kids. That doesn't mean I am consulted on all policies or decisions; but to tell you the truth, I don't want to be—I'd never get all of my own work done. But when I am consulted, it's not a phony gesture; my input is taken seriously. And there are mechanisms open for me to raise issues. Last spring I asked the faculty advisory council to look at how kids were treating each other in the halls. That led to a faculty brainstorming session on the topic of school climate. I don't always get people to buy into my issues, or even ask them to. But when I do, the issues are treated seriously, and I am esteemed for bringing them up even if my solutions do not carry the day."

10. Protection of What's Important

"Administrators protect my instruction and planning time by keeping meetings and paperwork to a minimum. In fact, we don't even have faculty meetings in the usual sense . . . certainly not just for business and announcements. Those needs get covered by memos and word-of-mouth contact with the principal. When we do meet, it is for curriculum and instruction purposes, often in small groups like the study group on learning styles I was in last spring."

11. Traditions

"There is always something special to look forward to as I scan the calendar. Be it a fair, a trip, or a science Olympiad, there are events coming up that students and teachers alike see as refreshing or challenging and a definite change of pace. Some of these traditions are rooted in ceremony, others in activity. They exist both in the curriculum as grade-level projects or activities, and as recurrent events within the life of the school."

12. Honest, Open Communication

"I take responsibility for sending my own messages. I can speak to my

colleagues and administrators directly and tactfully when I have a concern or a beef without fear of losing their esteem or damaging our relationship. Around here people can disagree and discuss, confront and resolve matters in a constructive manner and still be supportive of each other. And I can listen to criticism as an opportunity for self-improvement without feeling threatened."

Robert Hinton captures these qualities when describing changing relationships in a Chinese village during the revolution:

> One had to cultivate the courage to voice sincerely held opinions regardless of the views held by others, while at the same time showing a willingness to listen to others and to change one's own opinion when honestly convinced of error. To bow with the wind, to go along with the crowd was an irresponsible attitude that could never lead to anything but trouble. . . .The reverse of this, to be arrogant and unbending, was just as bad (Hinton, 1966, p. 395).

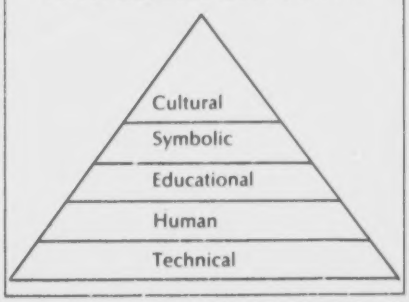
This type of communication is supported by several of the cultural norms. Difficult issues and criticism require an inner conviction that one is all right and respected by others. Appreciation and Recognition, Involvement in Decision Making, and Reaching Out to the Knowledge Bases support this kind of mutual respect.

How to Build the Norms of School Culture

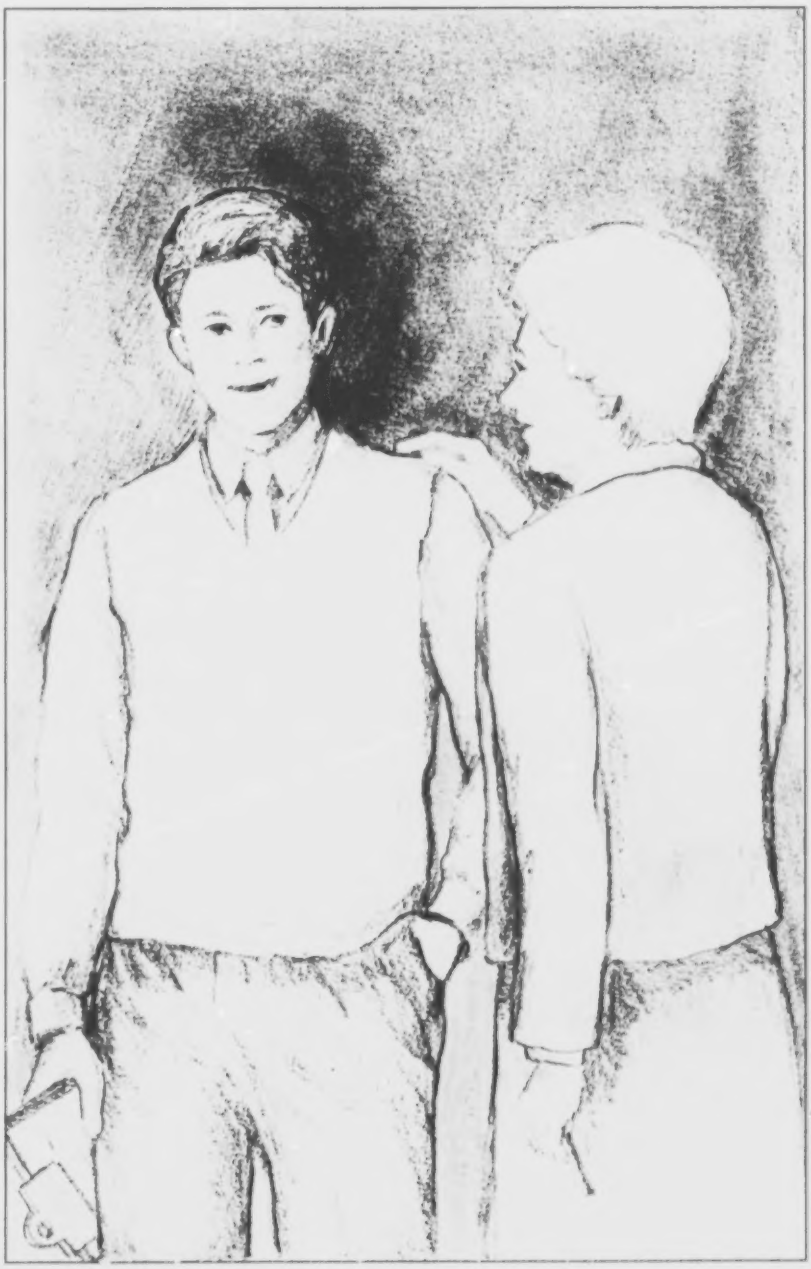
Sergiovanni (1984) describes five leadership forces where actions make a difference in building good schools (see Figure 2). Effective leaders have skills with which to apply each force.

Technical skills pertain to such managerial matters as scheduling and delegating; human skills include listening,

Figure 2. Sergiovanni's Leadership Forces that Build Good Schools.



"The knowledge base on teaching is very real and expanding all the time. It tells us that there are certain things that all teachers do, regardless of age group, grade, or subject."

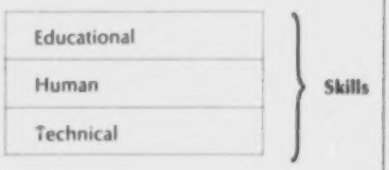


Trust and Confidence

group dynamics, and conflict resolution. Educational skills include knowledge about teaching and learning; symbolic skills include knowledge of and commitment to core institutional values and ways of articulating and representing them. And the cultural arena involves building norms such as the 12 discussed here. But if we are to understand what leaders do to build and maintain excellence in schools, the relationship among these five forces and arenas for action needs expansion.

Leaders show their technical, human, and educational skills through activities that call them forth rather directly. A parents' night must be organized (technical and human); difficult meetings chaired (human); and conferences held after classroom observations (human and educational). We offer the proposition that leaders show their symbolic and culture-building skills through those same activities and not in separate activities that are exclusively symbolic or cultural (with exceptions like opening-of-school speeches that are symbolic occasions). From this perspective Sergiovanni's diagram might be redrawn as shown in Figure 3.

Figure 3. Cultural and Symbolic Skills.



"Our district distributes $6,000 service awards for recognizing teachers' contributions in a variety of areas."

Cultures are built through the everyday business of school life. It is the way business is handled that both forms and reflects the culture. Leaders with culture-building on their minds bring an ever-present awareness of these cultural norms to their daily interactions, decisions, and plans, thus shaping the way events take place. Because of this dynamic, culture-building occurs simultaneously and through the way school people use their educational, human, and technical skills in handling daily events or establishing regular practices.

For example, suppose there is interest in a revised curriculum planning procedure. What would a culture-builder do in a leadership position? A sure way to prevent the crisis-management of curriculum—where small numbers of parents can successfully pressure a school board, superintendent, or principal to "look into" a curriculum area such as science—is to maintain a planning process that systematically and routinely evaluates and renovates all curriculum areas. Such a system might ask parent-teacher committees to assess the existing curriculum by reviewing literature, consulting experts, and interviewing parents. Having estabished a curriculum's strengths and weaknesses, the committee could write a statement of philosophy to guide the next phase—the identification of new curriculums, texts, and activities—recognizing that the review process might well validate existing programs.

With the first phase of planning complete, the parents leave the committee and turn the actual development of new curriculum over to the faculty and administration. Over the next several years programs and activities are piloted and implemented, leading back to the evaluation phase in approximately five years. In this way

". . . collegiality is an expectation that is explicitly stated by the leader, rewarded when it happens, and sanctioned when it doesn't."

all curriculum areas can be located on the planning cycle. While this approach to curriculum planning can be done by whole school systems, the process is especially powerful when conducted in individual schools.

A planning process such as this is itself an opportunity for infusing the cultural norms into a school. A good place to start is with a leader offering to parents and teachers Lightfoot's (1983) notion of a "consciousness of imperfection," a perspective in which we assume that any school has areas of strength and weakness and that the "good" school is distinguished by its openness to dealing with its imperfections. The school leader could use this opportunity to point out how improvements emerge from a culture that embodies norms such as our 12. She or he can then outline a process that demands experimentation by piloting new curriculum and encourage collegiality by asking teachers to work together on evaluation and design. Central to the planning is a commitment to involve stakeholders in decision making while being clear about the limits of their influence.

After completing the review, the administrator must ensure that teachers receive support to carry out their plans. For example, if a science committee recommends integrating microcomputers into science laboratories, funds need to be budgeted for purchasing equipment and training teachers. While providing support, the principal needs to emphasize the high expectations she or he has for their work. Building specific goals into teachers' formal evaluation—which should take place no less than every three years—is a useful way of making the connection between support and high expectations. Down the road a principal will want to recognize teachers' efforts by reporting to the superintendent and school board and perhaps even attaching rewards for their efforts. Our district distributes six thousand dollar service awards for recognizing teachers' contributions in a variety of areas.

The culture builders in any school bring an ever-present awareness of the 12 norms to everything they do in the conduct of daily business. It is this

awareness and commitment to culture building that is more important than any single activity or structure in the school organization. Once we are clear about what the important norms of a strong culture are, the activities and forms through which we build them are legion.

If we are serious about school improvement and about attracting and retaining talented people to school careers, then our highest priority should be to maintain reward structures that nurture adult growth and sustain the school as an attractive workplace. A strong culture is crucial to making schools attractive workplaces. If the norms we have outlined are strong, the school will not only be attractive, it will be energized and constantly improving. □

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LYNNE MILLER AND
ANN LIEBERMAN

"Educational leadership happens, when it happens at all, within the cracks and around the edges of the job."

School Leadership Between the Cracks

For the last ten or twenty years, people have been trying to influence what happens in schools by riding in on white horses, carrying the latest curriculum unit or the latest philosophy of education, and then charging off. What they discovered—and it came as a shock—was that they had to live under the roof of the school to have an influence on it—and even then, change was not assured (Barth, 1976).

Last year, one of us had the opportunity to "live under the roof" as an assistant principal. Her assigned school, South Side High, has 1,700 students and is located in a medium-sized midwestern city. Because of her background, she was hired "to see whether all that theory can actually be applied to a school and have any impact."

Though usually associated with school discipline, the role of the assistant principal varies from school to school. At South Side, three administrators work as a team, sharing responsibilities and areas of specific control and supervision. Although the principal definitely has the final word, the assistant principals assume a good deal of the school leadership and administration.

By presenting selected incidents in a week in the life of an assistant principal, we hope to capture some of the flavor of the job and to point out some of the potential for establishing positive leadership as well as the difficulties in being the kind of principal who can really make a difference in a school.

A Week In The Life . . .

Monday

The day begins as usual. I arrive at 7:30, check in with my secretary and the other administrators and the office staff. Teachers start arriving and I greet them at their mailboxes. This is the morning ritual. I rush off to make sure the buses are arriving without incident and that the corridors are clear until the bell rings. These are all safety measures and they get a great deal of attention.

Since it is Monday, the first agenda item is the weekly guidance meeting. The idea of the meeting is to create a "team" feeling among counselors and administrators. Somehow, after a full semester of trying, the concept still isn't working. The meeting, as usual, is marked by silences, false starts, and disengagement. I think we are all about to give up on the idea. It looked great on paper, but it's just not very successful in practice.

This article is adapted from a forthcoming book *Teachers: Their World and Their Work, Implications for School Improvement* by Ann Lieberman and Lynne Miller.

Lynne Miller is a school administrator and Ann Lieberman is Professor, Teachers College, Columbia University, New York City.

This is the week I am to begin the formal evaluation process with teachers. This is a serious part of my job. I want to put all of my training in supervision to good use, but time is short and commitment to the process is very low. I meet for a few seconds with Mr. Smith to arrange for an observation time. This brief encounter will count as our "pre-conference." I ask him if there is anything special I should look for. He says he can't think of anything, just come and watch.

The rest of the day is spent dealing with specific discipline issues, talking to teachers in informal ways—in my office, outside their classes, in the faculty lounge. I spend as much time as I can out of my office, trying to feel the pulse of the school. Students and teachers alike feel no hesitation in registering complaints, making suggestions, and telling me what's good and bad about the day.

Even as I make my rounds, I think of the state enrollment report sitting on my desk—due by Wednesday. I'll steal half an hour at the end of the day, I vow to myself. All too soon, the dismissal bell rings and the building is devoid of students. My desk, clear a few hours ago, is a disaster area. I cast a wistful glance at the state enrollment report at the top of the heap and decide instead to continue my conversation with three teachers standing in the doorway of my office. I'll get to the report tomorrow.

Tuesday

The morning ritual begins the day. I spend some time meeting with student representatives from the senior class to discuss the prom and spend the usual time in my office dealing with discipline problems. Most of these problems are minor, but they add up to a major portion of my job. Maintaining an orderly community at the school is a top priority: it is, I think, a pre-condition for effective teaching and learning.

I manage to spend a full hour in Mr. Smith's class as planned. He is a gifted teacher. All I can say to him at the end of the class is "Good work. Keep it up." And that about takes care of the "post conference." I think Mr. Smith is a good teacher and he knows it. I feel silly saying anything more. He accepts my compliment and then, in what for him is a sweep of emotion, tells me how much it means to hear positive feedback from an administrator. He hasn't been complimented for years, he admits, and he likes it when he is.

On to the lunchroom where I walk into a mild confrontation between ten black students and two white lunchroom supervisors. The issue is radios. The black students have been asked to turn their radios off, while some white students at the other end of the cafeteria continue to play theirs without interruption. What could be a racial incident is quickly diffused with the help of a school counselor. We ask the white students to turn off their radios as well, and peace is maintained. I ask the supervisors to pay attention to the behavior of all the students, not just an identifiable group. The problem is solved for now, but the issues of personal and institu-

"My desk, clean a few hours ago, is a disaster area."

tional racism still need to be addressed—no small matter, I know.

As I walk down the halls at passing time, I get into a conversation with an English teacher who's trying a new language game in her class. She invites me in and I spend a good deal of my time working as an assistant to the teacher, showing the students how the game works. When the class ends, the teacher and I share our excitement about what has transpired. We spend the next hour going over the class minute by minute, exchanging insights, and making suggestions for improving the game and designing follow-up activities. This feels like real instructional supervision; ironically there is no formal procedure. Instead there is serendipity and collegial interaction.

Wednesday

This is one of those days I dread and it always happens on a Wednesday. I spend almost the entire day as policewoman, judge, and jury. There are two fights in the halls. Several teachers make discipline referrals. My office is wall-to-wall students. The day seems short and so is my patience. This is *not* the reason I went into educational administration.

Just as I feel I've passed the hump, I'm met by seven students who have left a classroom on their own to complain about the teacher and his methods. The students want me to take them out of the class. They're angry and they want vengeance. Later in the afternoon, four parents call with the same message. I stop by Mr. Moyer's class and ask him to see me before he leaves. When I tell him about the exodus of students and the rash of parent calls, he is shocked and angry. He has never been *told* about complaints before and he doesn't want to hear them. He makes it clear that he considers it the principal's responsibility to handle all complaints and to shield the teacher from them. I explain that I feel differently, that he is entitled to know of any complaints against him so that he can address them himself. We agree to meet tomorrow during his preparation period.

The final bell has rung and the day is over, except for the enrollment report that is due today. I close my office door and work on the forms until they are complete. As I leave the building to take the report downtown, I run into one of our coaches. He tells me the barometric pressure was low today. That explains it, I think, as I leave the building. Everyone knows that school is harder when the pressure is low.

Thursday

The day begins without incident. Life is back to normal at South Side. I approach the day with guarded optimism.

The highlight of the day, of course, is the conference with Mr. Moyer. I take time to prepare some documentation on what the students' and parents' complaints are about. When Mr. Moyer enters my office, I begin by telling him that the purpose of this conference is to look at the nature of the student concerns and to work together to improve the way the class is going. Mr. Moyer immediately takes offense. "I've been teaching for 20 years and I don't need any help or improvement. The students have lost all respect for authority: that's the problem—not me. What we need is harsher discipline. Check all of my evaluations from previous years. All are excellent or satisfactory. No one has ever said anything to me that even suggested I need help. I just have a bad crop of students this year." In fact, what Mr. Moyer says is partially correct. Even though it's common knowledge around the school that he's had consistent problems with students and parents over the years, there is nothing on record to indicate this is the case. Previous evaluators never challenged Mr. Moyer with complaints; they simply filled out the evaluation sheets in a perfunctory way so as not to cause more trouble. Mr. Moyer has continued to struggle in his classroom without feedback, support, or assistance.

As the conference continues, I realize the issues are not black or white, that there is a history I must recognize and deal with, and that Mr. Moyer is somewhat justified in his anger. On the other hand, the students have some valid points and they could be receiving more organized and effective instruction. I spend the better part of an hour with Mr. Moyer and we agree to begin a series of steps whereby we can answer the student and parent concerns. I will drop by his classes more regularly and we will continue to meet. I'm not certain how this will turn out in the end. In time, one of two courses will emerge. Mr. Moyer and I will develop a working relationship aimed at improving instruction—or we won't. In the latter case, I'll have to consider placing Mr. Moyer on probation so an "instructional assistance team" can be formed to work with him. In the meantime, we both need practice in working together.

That done, I turn my attention to other areas. I meet with the cheerleading and pompom sponsors and we plan ways to get more minority girls involved in those activities. I stop by the class of the debate coach and wish the team good luck in their first contest. The day winds down with a small faculty meeting of the English department where the topic is teaching the low-skilled students. The meeting goes late and we all leave the building at 5:00, having begun a project to collect appropriate learning materials and to build our own bank of activities.

Friday

Donuts! Friday means donuts, all over the school. In small faculty lounges and coffee clatches, teachers have a system for collecting money to supply Friday morning donuts. I've joined one such group and I happily munch on my pastry as the morning begins.

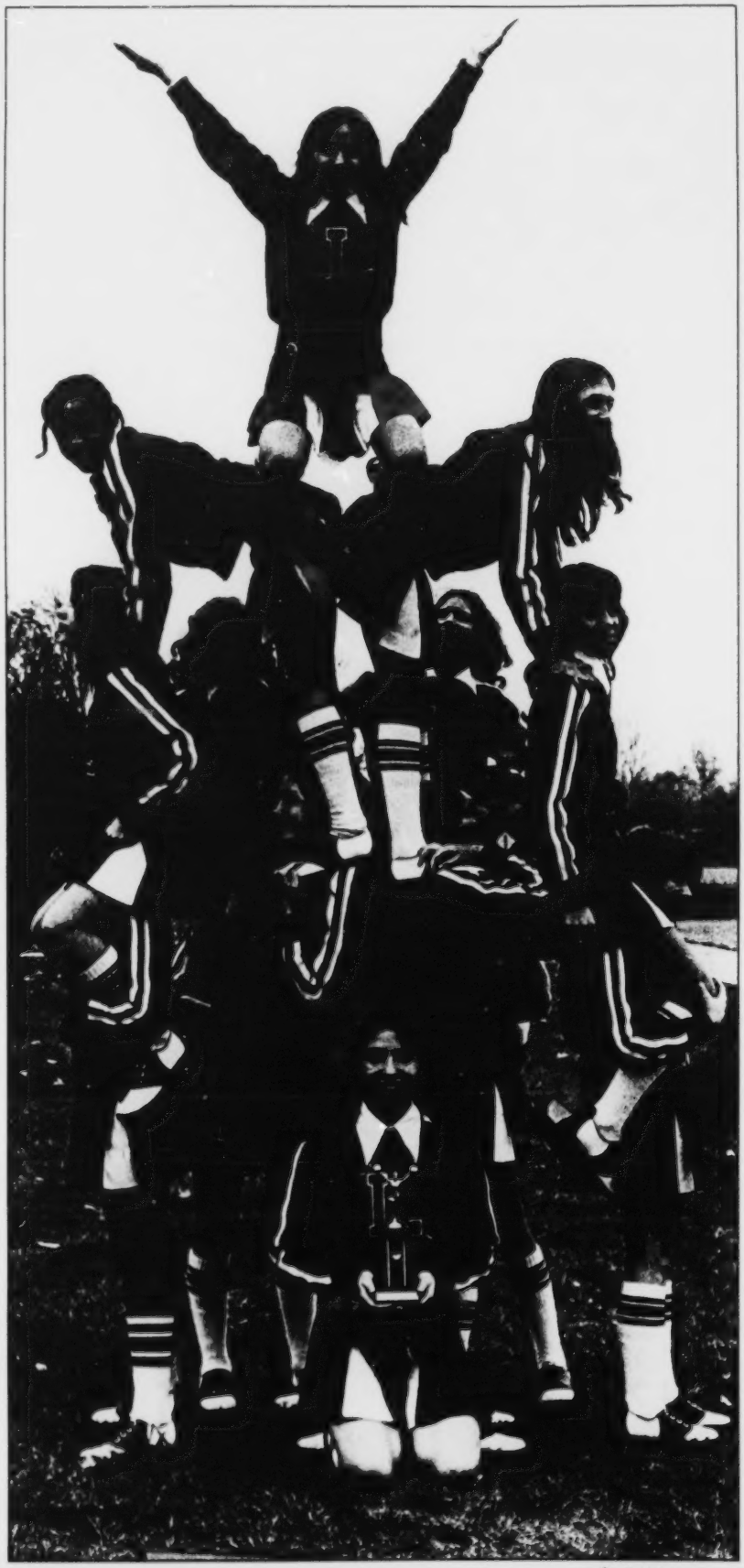
Friday also means a pep assembly—a delight for the kids and a veritable nightmare for administrators. From the first ringing of the bell to the last rousing chorus of the school song, I hold my breath and hope for peace. This assembly goes without incident and students return to their classes to resume the school day. Pep assemblies are a source of faculty contention. Some teachers feel that they are necessary for school spirit and for a meaningful high school experience, while others want to abandon them in favor of uninterrupted instruction. I tend to side with the latter position, but I'm also aware of tradition. So, we have pep assemblies—not as often or as long as some schools, but we have them.

The school mail brings my paycheck and yet another report to be completed. The day progresses peacefully and predictably. When the dismissal bell rings, we all beat a fast path home. No one stays late on Friday.

Reflecting on Experience: Conceptualizing a Role

Principaling is a lot like teaching. It is personal, conflictual, and uncertain. One learns the job by doing it, never sure that the job is being done well. The job, as we see it, includes a wide variety of roles. To name a few:

Omniscient Overseer. A principal simply has to know everything that is happening in the building all the time. While teachers focus on the particular, principals look to the general: not one classroom, but all classrooms; not one interaction, but all interactions. Everything that happens in a building is im-



portant. The view from the principal's office must be broad and clear; it must encompass everything.

Confidant and Keeper of Secrets. The principal gains knowledge of the school through a variety of sources, some public, some private.

As the key communication links in their organization, administrators know much that they cannot share with others. These confidential matters, be they good or bad secrets, are an important part of administrative life (Burlingame, 1979).

Keeping secrets means isolation and having the fortitude not to share knowledge about a particular teacher, a particular incident, a particular problem that arises and needs solving in private. The confidences of students about their classes, a teacher's inability to keep class control, underlying currents of hostility that threaten to flare up at a moment's notice—these are secrets a principal keeps. They are private matters in a very public world.

Sifter and Sorter of Knowledge. One of the problems about knowing everything is that all things can seem equally important. The principal has to make distinctions. She has to decide what needs tending, in what order. Is cheerleader and pompom selection more or less important than attending a department meeting? Does enforcing a rule always take precedence over individual needs? What has top priority: completing a state report on time or meeting with a teacher in distress? What tasks can be delegated and what requires personal attention? Such are the distinctions a principal must make, under conditions that are less than ideal, again and again in the course of a day, a week, a term, a year.

Pace Setter and Routinizer. There is periodicity in the life of schools (Lieberman and Miller, 1978). Regularity is set by the principal. There are regular meetings to set, supervisory duties to fill, schedules to be designed and implemented. There are morning routines, informal sessions with staff over coffee, an "open door" at the end of the day—small rituals that help give order to a school. As routines are established, expectations are fixed. The routines of an administrator lend stability to a building as the routines of a teacher stabilize a class.

Referee. A principal spends a good part of the work day running interference between groups and individuals who are in conflict, acting as referee in a

game where the rules are unclear. Whether intervening in a matter of classroom discipline or a potential racial incident in a cafeteria, the principal is an arbiter of fair play. On another level, the principal referees among departments covetous of classroom space or a share of the budget. The principal mediates between the faculty advocates of school spirit and those who favor uninterrupted instruction. Daily, the principal stands at the center of an arena of dissenting factions, sure to offend someone and to never please everyone.

Linker and Broker. A principal links people, ideas, resources within a building and outside of it. She knows the need and skills of the faculty and is able to make good matches, if she takes the time to do so. In the larger world of the district and the community, the principal brokers with the central office, with outside agencies, and with the local authorities to gain services and recognition for the school. She is always working to cement alliances to benefit the building's programs.

Translater and Transformer. As the schools' chief executive, the principal has to carry out policy from above as well as make policy from within. A principal receives orders from a supervisor, a central office administrator who has long been out of touch with schools. Be it a new teacher evaluation procedure, a revised discipline code, a scheduling format change—all such policies are left to the principal to translate to the staff and to transform to meet the needs of the particular building at a particular time. What is actually implemented looks little like what has been mandated; it is reformed to fit the mold of the school. The policy seldom reshapes the school; the school reshapes the policy (Berman and McLaughlin, 1978). And the principal is the primary architect of the project.

Paper Pusher, Accountant, and Clerk. A principal is overwhelmed with housekeeping responsibilities. With new legislative mandates, local accountability procedures, and specially targeted programs, there are new forms to complete, new numbers to tally, new reports to file, new records to organize. The teacher evaluation procedure at South Side required documented observation notes as well as a narrative summary. Because the material was confidential, the three principals typed, duplicated, and mailed their own forms for every teacher in the school. The state enrollment report that hung like an albatross around the neck of the assistant principal was one of many time-consuming bits of paperwork. In addition, there is a budget to develop, space to allocate, schedules to program, and a desk constantly in need of clearing. Unlike their counterparts in industry, principals do not supervise rationalized operations. There is still a quality of "Barnaby, the Scrivener" to the school office.

No matter how else one construes the role, the principal is held ultimately accountable for the smooth operation of the building. She is the manager of all resources—material and human. The job is to "maintain order, maximize production, and minimize dissonance" (Barth, 1981). She represents "management" and the teachers represent "labor." She supervises a staff that includes a teaching faculty, custodians and engineers, and cafeteria workers. If the building is in disarray or the grounds unkempt or the cafeteria service inefficient, it is the principal's job to put things back in working order. A public measure of principal's competence is the well-functioning of the plant. It is an area that requires careful and constant scrutiny and immediate action to put things aright.

Disciplinarian. Part of maintaining a plant is maintaining order. Whether responsibility for enforcing discipline is delegated or kept for oneself, the principal sets a tone for what is expected, what is tolerated, and what is punished. A school has a reputation as "loose" or as being a "tight ship" and it rests on the principal to make that reputation. The staff follows the leader. At some schools, there are general parameters of appropriate behavior. South Side follows this model. At other schools, there is a plethora of rules and regulations and a specified response for each infraction. Teachers watch and wait to see how discipline is handled in the executive office and then follow suit in their classrooms. A principal is seen as weak or strong based on how she views discipline.

Scapegoat. Because the principal is literally in charge of everything, she is the first to be blamed when something goes wrong. She is scapegoated by the staff, the central office, the parents, and the general community. If the building is not in full working order, it's the principal's fault. If a teacher can't control his class, the principal is to blame. If the cheerleading squad doesn't reflect the racial mix of the school, the principal is taken to task. Wherever she turns, the principal is held responsible for the shortcomings of the building.

Educational Leader. Every principal wants to be an educational leader. Few get the chance. Pre-eminently, there is the *time* factor. There isn't much time built into the system for meaningful educational dialogue, planning, and evaluation. The formal time that is scheduled is often misdirected. Witness the elaborate teacher evaluation process mandated at South Side from the superintendent's office: pre-conference, observations with documentation, post-conference. What often transpires is cursory and uninteresting. It certainly has little to do with educational leadership. What opportunity that exists for real leadership is marked by serendipity and opportunism—by seizing the moment as it comes.

When an administrator compliments a teacher for a well-constructed and taught lesson, she is making a statement that excellence is recognized and rewarded. When a principal meets with a teacher whose classroom is in revolt, she is saying that she's concerned about what happens behind the closed doors of a classroom and is signaling a change from previous administrators who have given high marks to a teacher in need of improvement. When a principal attends department meetings that focus on curricular issues, she's letting the staff know that she supports dialogue and informed action. All of these events and actions may be defined as educational leadership—not rational, linear, and planned; but ad hoc, responsive, and realistic. *Educational leadership happens, when it happens at all, within the cracks and around the edges of the job.*

Moral Authority. Finally, the principal is the chief moral authority in a school. It is her notion of justice that prevails. The principal can maintain neutrality and let things progress as they always have; even that is a moral statement. A principal may take an active stance, threatening the assumptions of the staff and moving the school in more progressive or more regressive direction. A principal condones or condemns certain behaviors and attitudes; she models moral precepts as she goes about the job. When the administrator at South Side took the side of minority students in the lunchroom-radio incident, she gave a clear message to the faculty that discrimination was not to be tolerated. A powerful message was transmitted. Had there been administrative apathy, an equally powerful point would have

been made. At root, a principal's actions are statements about justice. The role of moral authority is one a principal can seize and make her own—or it is one, like educational leadership, she can avoid and then leave the mantle unclaimed.

Implications

There is much written of late about the power of the principal to make change and school improvements happen (Berman and McLaughlin, 1978). A good principal, the story goes, can create a school where children learn and teachers develop, where openness, cooperation, and harmony reign. We want to challenge that notion a bit because, given our understandings of the complex roles of a principal, such a view of the office is out of touch with much of what we have experienced.

The reality is that there is a huge gap between what the role of the principal is supposed to be and what it actually is. For principals, there are two worlds: the world of "is" and the world of "ought."

A principal *ought* to be a leader; more likely she *is* a manager.

A principal *ought* to be a helper; she *is* an evaluator and judge.

A principal *ought* to share knowledge; she *is* a keeper of secrets.

A principal *ought* to be democratic; she *is* autocratic, at least some of the time.

A principal *ought* to be concerned with individuals; she *is* concerned with the total organization.

A principal *ought* to be long-range; she *is* ad hoc, spontaneous, and situation specific.

A principal *ought* to be an innovator; she *is* a maintainer.

A principal *ought* to be a champion of ideas; she *is* a master of the concrete.

Ultimately, a principal has to make choices about what to be and how to become. The principal has at least three clear options:

1. Choose to live totally within the world of *is*, and in so doing disparage the world of *ought*. In this instance, a principal opts to be a good manager and not a good leader; she supports and maintains the status quo and resists attempts to change things. She may become oppressive or laissez-faire. In either case, she neither initiates nor actively supports school improvements.

2. Choose to live tentatively in the world of *is*, with one eye cocked toward the world of *ought*. By so doing, she leaves herself open to outside influences, ready to take a step toward leadership, questioning the status-quo, and improving the school. She may not initiate improvement activities, but she can be won over. She can lend the support of her office to the programs and plans of others.

3. Take the leap. She can take on the behaviors that effective leadership requires. She can become a helper, more democratic and open, more involved in individual growth issues, more long range, more collegial, more innovative, and more involved in the world of ideas. A principal who takes this third option is capable of initiating improvements and supporting the efforts of others.

If there were magic in the world, all of our school principals would choose the third option. But there is no magic. There are, instead, systematic and ad hoc attempts to make a dent in what is, to have an influence on what may become. These attempts take many forms. There is trial and error, persistence, being present as events evolve, being attentive, being ready.

Principals need help, just as teachers need help. They need to have the time or *learn to make the time* to spend their energies in the world of "ought." This is perhaps the most challenging and the most compelling of tasks that people concerned with educational leadership must now confront: how to provide for the care, sustenance, and development of principals in a way that acknowledges the realities of the world of "is" and helps build toward the world of "ought." ■

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Topic D

Supervisory Techniques for Planning and Managing Educational Programs

In addition to the all-important human skills required for quality leadership, supervisors need skill in planning and managing educational programs. The articles in this section provide information on four management processes—the instructional audit, profiling, scanning, and quality circles.

In "Using the Instructional Audit for Policy and Program Improvement" Stephens and Herman explain what an instructional audit is and give a step-by-step description of how one is conducted. The authors, one of them the principal of the school in which the audit was conducted and the other the external auditor, write convincingly of the value of the process. The reader will welcome a firsthand report which includes a list of elements to guide an instructional audit, an example of an audit, and a discussion of the advantages and disadvantages of the process.

Profiling is the process Blum and Butler advocate for gathering information about student performance. "Managing Improvement by Profiling" describes the activities of an overall school improvement program but focuses on the collaborative development of a school profile and on the use of the profile in setting goals for school improvement. The article is even more useful because of the figures which depict graphically the steps and content (menu) of profiling and the examples of worksheets for profile evaluation and goal setting.

"Anticipating and Managing Change in Educational Organizations" describes a process by which educational decision makers can systematically scan a variety of sources of information to identify, organize, and analyze data for evidence of emerging issues. Designated scanners evaluate the probability and impact of each issue for the purpose of anticipating and managing change. With the information in the article, readers will be able to use the process themselves. Supervisors who believe in long-range planning and intelligent decision making will want to consider the potential of the scanning process described by Renfro and Morrison.

The quality circle is a mechanism used successfully in Japanese and American industry for involving workers in solving the organization's problems of productivity and quality. In "Quality Circles in Education," Chase demonstrates how the mechanism can be important in education and describes how the circle operates. He explains eight techniques used in the quality circle process, gives examples of school problems which are appropriate for the process, and discusses implementation. Chase concludes with a word of caution about what circles do not deal with and about the need for sincere commitment by the top administration to the quality circle process before implementation is begun. For those interested in ways of empowering teachers, Chase's article will provide the opportunity to learn more about this widely publicized, participative management tool.

As readers look more closely at the articles, the following questions and activities may stimulate discussion and action.

1. Outline a plan for conducting an instructional audit in the district in which you work or in one with which you are familiar. Of the ten elements listed by Stephens and Herman as an audit guide, which would you include in the audit and why?

2. Compare and contrast the instructional audit described by Stephens and Herman with the profile contents menu shown in Figure 2 of the article by Blum and Butler.

3. Using the Renfro and Morrison article as a guide, scan the following four sources for the last 12 months: *U.S.A. Today*, *Educational Leadership*, *Phi Delta Kappan*, and a major newspaper in your state. Identify one school issue that you believe has immediate implications for the status and role of the instructional supervisor and develop an analysis network for that issue. Discuss your analysis network with other supervisors to determine (1) the probability that the issue will continue to be important for the next five to ten years, and (2) what will be the likely long-range impact of that issue on the status and role of the instructional supervisor.

4. As you reflect upon the article by Chase and your own work setting, describe how you would go about starting quality circles in your school. What would be the advantages of having this process in place? What would be the limitations? What would be the consequences for districtwide supervisors who work with your school? For the principal? For other instructional leaders in the building?

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GAIL M. STEPHENS AND JERRY J. HERMAN

Using the Instructional Audit for Policy and Program Improvement

An audit by an outside expert yields a detailed report of recommended changes and of what a school district is doing right.

Do you consider instruction to be your top priority—more important than the business and financial operations of your school district? Do you spend thousands of dollars on experts to evaluate your financial and accounting transactions to prove that your fiscal practices are productive and credible? Would you like to have school employees and your community feel that your instructional practices are equally productive and credible? Consider conducting an instructional audit.

The instructional audit is an investigation by an external instructional specialist who samples all available data related to instruction, identifies areas where data are lacking, and directly observes instructional and administrative processes related to instruction. The investigation ends with a detailed written report of the condition of the district's instructional programs and practices and with recommendations for improvement. It also includes a confidential management letter to the superintendent, which provides specific suggestions and processes to carry out improvements in crucial areas.

Financial audits are performed on the basis of standards widely accepted by national auditing associations. Since no universally accepted standards yet exist for instruction, the standards relied upon must be derived from current research, theory, and exemplary practices on learning, teaching, instructional leadership, and effective schools.

Gail M. Stephens is Superintendent, Whitmore Lake Public Schools, Whitmore Lake, Michigan. Jerry J. Herman is Superintendent, Greece Central School District, Rochester, New York.

Elements of an Instructional Audit

All instructional programs are composed of elements that are human-, process-, or structure-related. The most productive instructional programs use process elements to maintain an appropriate balance between the human and structural elements. The instructional auditor identifies and examines the internal and external items that make up the human, process, and structural elements of the district's instructional program. Figure 1 lists the items that should generally be examined in an instructional audit.

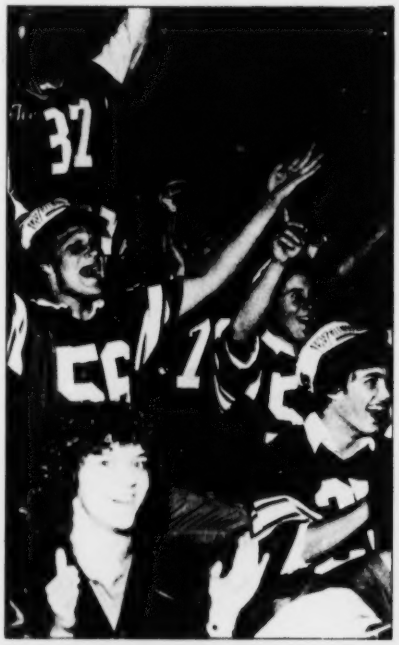

Figure 1. Audit Guide.

Board of Education Policies

Curriculum development
Research and development
Selection of instructional materials
Teaching controversial issues
Procedures for handling complaints and appeals
Testing program
Effective instructional practices
Selecting and using instructional consultants
Staff development
Quality of work life
Teacher supervision and evaluation
Homework
Grading and reporting to parents

Job Descriptions

Teachers
Principals
Instructional administrators
Curriculum specialists
Superintendent
Instructional aides

Budget Allocations

To instructional accounts
To instructional research and development
To curriculum development
To staff development

Negotiated Contracts

Academic freedom
Curriculum development
Staff evaluation
Staff development
Class size

Communication

Employee newsletters
Community newsletters
Media coverage
News releases
Student surveys
Community surveys
Employee surveys
Support groups
Advisory councils

Instruction

Test scores
Cost per unit of instruction
Allocated time
Instructional time
Academic learning time
Curriculum guides
Lesson plans
Percentage of students receiving failing grades
School climate
Citizen volunteers
Curriculum council
Mission and goals
Effective instructional practices
Instructional supervision
Classroom management/discipline

Elections

Operational millages—passed or failed, percentage of favorable votes
Bond issues—passed or failed, percentage of favorable votes

Students

Retention rate
Absenteeism
Suspension rate
Expulsion rate
Drop out rate
Percent attending private schools
Age-grade distribution

Employees

Absenteeism
Grievances
Assignments outside of certification
Assignments outside of experience
Quality of work life

Administration

Delegation of authority
Fit of authority to responsibility

"The instructional audit provided the impetus for an unequaled emphasis on instruction in the Whitmore Lake School District."

Figure 2 shows the human, process, and structural relationships of the items.

Specifics to be included in the audit and decisions as to who receives the various items of information need to be negotiated between the superintendent and the auditor. In addition, because the instructional audit is likely to lead to follow-up improvement activities, it should be decided at the time of contracting for the audit whether or not the outside instructional auditor will continue in such support roles as: (1) policy writing advisor to the superintendent or the district's policy writer; (2) inservice trainer of teachers and administrators in deficient areas; and (3) program developer of curricular or management areas found to be lacking.

Figure 2. Instructional Elements.

	Human Elements	Process Elements	Structure Elements
Internal	*Examples:* Employee surveys Student complaints Grievances	*Examples:* Academic learning time School climate projects Teaching to objectives	*Examples:* Board of education policies Curriculum guides Budget allocations
External	*Examples:* Community surveys School elections	*Examples:* Media coverage Citizen volunteers	*Examples:* Private school enrollment Tax rates

Obviously, each superintendent and each auditor may wish to add to, modify, or subtract from the list provided in the audit guide in Figure 1. The local district may choose a comprehensive audit, or it may choose from any of the components listed in the audit guide. The local district also may choose to: (1) merely have a review with recommendations listed; (2) add the development of a plan to overcome identified deficiencies; and (3) add post-audit consultant and training services.

Conducting an Instructional Audit

The following is a step-by-step schedule of how the Whitmore Lake School District carried out its instructional audit.

1. The superintendent, Gail Stephens, contracted with an independent consultant, Jerry Herman, to conduct the majority of the instructional audit. Because of budget and time considerations, items from the audit guide were prioritized.

2. The superintendent and the auditor reviewed the items on the audit guide to determine: for which items existing data were available; in which areas data could be easily retrieved if simple collection devices were devel-

"The audit provides a snapshot in time of the condition of instructional programs and practices."

oped; which items required actual observation by the auditor; and which items lacked sufficient data for a valid analysis.

Obviously, some items had to be examined while school was in session; for example, the process element dealing with the use of school time. Some items could be examined from existing data; for example, allocated time data were available on the State of Michigan's annual report form. Examining the use of instructional time required the development of a standard reporting format, but once the form was developed and completed the data could be analyzed at any time. Analysis of academic learning time, however, required that engagement rate observations be conducted by the instructional auditor while students were in class.

3. Once the audit content and data collection schedule had been developed, the superintendent prepared the instructional staff for the audit. Teachers were informed that the auditor would be conducting engagement rate observations in their classrooms and were assured that the data collected would be used to establish a districtwide baseline measure and would not be used for individual evaluation purposes. Individual teachers who requested their own engagement rate data could arrange to obtain it and to have a brief consultation with the auditor. Administrators were informed of what data would be retrieved from their files and what the audit timeline would be. Explaining the audit content and process to the staff and providing opportunities for the staff to meet informally with the auditor in the early stages of the audit prevented some of the discomfort that is to be expected whenever the most human elements of a school district are scrutinized.

4. The audit was conducted by reviewing information on file and by direct observation. Where the data base was large, the auditor drew samples for analysis.

Items that the auditor investigated fell into the following nine categories:

Board of Education. The auditor analyzed existing policies that related to instruction and identified areas for which policies should be developed. Although the auditor made suggestions, both he and the superintendent felt that the local authorities should actually write the policies.

Job Description. The auditor reviewed the instruction-related elements of administrative job descriptions, suggested additions, and recommended writing additional job descriptions.

Budget Expenditures. The history of the district's instructional expenditures was reviewed and compared with other Michigan school districts.

Master Contracts. The auditor analyzed the contracts with unionized employees to determine where and how they affected the instructional program.

Internal and External Communications. The auditor reviewed the methods the district used to communicate with students, staff, and the public, and made suggestions for improvement.

Instructional Monitoring and Delivery Systems. This major section of the audit included review of the test data, student and employee attendance data, use of instructional time, curriculum development, use of effective teaching behaviors, and school climate data.

Elections. The auditor analyzed the history of voter support for school levy issues.

Administrative Authority. Policies, contracts, and other structures that establish and control administrators' authority related to instructional matters were reviewed.

Staff Development. The auditor reviewed the content, participation, and evaluations of the instruction-related staff development program and made suggestions, based on classroom observation, for additional training programs.

For each of these areas, the auditor's report outlined the existing status of the items under review and presented suggestions for such things as obtaining data, improving programs, and developing policies and guidelines. For example, the auditor:

- Recommended negotiating stronger qualification requirements for the reduction in force section of the teacher master contract and suggested items related to teacher evaluation that should be incorporated in the procedure for reduction in force.

- Suggested a detailed analysis for the reading program at specified grade levels.
- Recommended specific inquiries for determining causes of student absenteeism.
- Suggested specific methods of increasing academic learning time without increasing the school day or year.
- Provided recommendations for improving curriculum and the curriculum development process.

Effective Instructional Practices Policy

Whitmore Lake Public Schools
Whitmore Lake, Michigan

Instruction

Effective Instructional Practices

POLICY: Education theory and research have identified certain teaching behaviors and classroom management techniques which are consistently related to increasing student achievement. In order to provide Whitmore Lake students with the highest quality instruction, it shall be the responsibility of the administration to identify such practices and cause them to be implemented in the district's classrooms.

The staff development program, the teacher supervision and evaluation process, and the testing/monitoring system shall all support the implementation of the most current effective instructional practices.

POLICY
ADOPTED: 10/10/83

RULES AND REGULATIONS:

1. All teachers shall be provided the opportunity to participate in the Effective Instructional Practices inservice program.
2. All teachers shall be expected to incorporate the following instructional skills in their daily teaching:
   a. Selecting instructional objectives at the correct level of difficulty.
   b. Teaching to the objective using relevant teacher behaviors and eliciting relevant student behaviors.
   c. Monitoring students' learning and adjusting instruction appropriately.
   d. Effectively using the principles of learning that affect motivation, rate and degree of learning, retention, and increasing productive behavior.
3. Teachers shall be encouraged to assist each other to improve their instructional skills through peer observation and conferencing.
4. Principals shall make instructional supervision a top priority and shall devote the necessary time and attention to (1) adequately develop instructional supervision skills, (2) observe in classrooms, and (3) meet and confer with teachers to assist them to improve instructional skills.

RULES AND REGULATIONS
ACKNOWLEDGED: 10/10/83

- Constructed a sample instructional task matrix to delineate the responsibility and authority of the people who share in instructional decision making.
- Proposed 13 new and revised Board of Education policies to establish an operational framework for the district's instructional program, which covered: mission and goals, school climate, mastery learning, time for learning, testing/monitoring programs, effective instructional practices, enrichment and accelerated learning programs, homework, curriculum development, teacher supervision and evaluation, attendance, grading and reporting to parents, and graduation requirements.

What the Instructional Audit Accomplished

The instructional audit provided the impetus for an unequaled emphasis on instruction in Whitmore Lake. Immediately after accepting the audit, the Board of Education disseminated the 13 proposed policies and arranged for their review by citizens and staff. With the exception of the graduation requirements policy, which was tabled for further study, the policies were quickly adopted. The following implementation strategies and activities demonstrate the magnitude of the effort:

Board of Education Retreat. The Board of Education participated in a weekend retreat with an external consultant for the purpose of selecting district goals for a three-year period. Two of the goals selected were to prepare a three-year plan for curriculum development to implement mastery learning and to establish a format for reviewing and revising graduation requirements.

Administrative Performance Objectives. Principals attempted the following performance objectives for the year:

- Design and implement a building-level school learning climate enhancement program.
- Improve student attendance.
- Develop and utilize clinical supervision skills to effectively assist teachers to improve their instructional practices.

Curriculum Development. Teacher language arts and math committees

prepared and conducted a program to revise student learning objectives for a mastery learning program. The format developed by these two initial committees will soon be followed in other subject areas.

Staff Development. The district provided research-based effective instructional practices training for all K-12 teachers and clinical supervision training for all interested teachers.

Grading and Reporting to Parents. A teacher committee was established to develop a reporting system for the mastery learning program.

Homework. The Community School Advisory Councils developed district-wide rules and regulations for homework for all students.

Advantages and Disadvantages of an Instructional Audit

Based on our experience at Whitmore Lake, we conclude that an instructional audit has the following advantages and disadvantages.

An audit can be beneficial in that it:

1. Is conducted by an external expert who has no vested interest in the past or current instructional program of the school district.
2. Provides a snapshot in time of the condition of instructional programs and practices.
3. Is based on standards derived from current research, theory, and exemplary practices on learning, teaching, and effective schools.
4. Reports what is right as well as what is in need of improvement.
5. Provides a sound basis for determining priorities among needed program improvements and allocating required resources.

Some disadvantages of inviting such close examination are:

1. The auditor must be knowledgeable in all elements of instruction, possess adequate research skills, and be able to concisely articulate findings from a complex operational system.
2. The audit may disturb the status quo, and change is difficult for some people to accept.
3. The audit may disclose deficiencies that some people would rather not address.
4. The publicity surrounding the audit may cause political discomfort to the Board of Education, administration, unions, or employees.

A Wealth of Information

The Board of Education, administration, staff, and citizens of the Whitmore Lake School District determined to develop a responsive, continually improving educational system. The instructional audit provided a wealth of information to assist the district in establishing responsible goals, developing effective programs, and monitoring results. Instruction is clearly placed as the top priority, and its soundness, credibility, productivity, and effectiveness will be continually assessed. The result: excellence in planning and monitoring and predictability in achievements.□

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Managing Improvement By Profiling

ROBERT E. BLUM AND
JOCELYN A. BUTLER

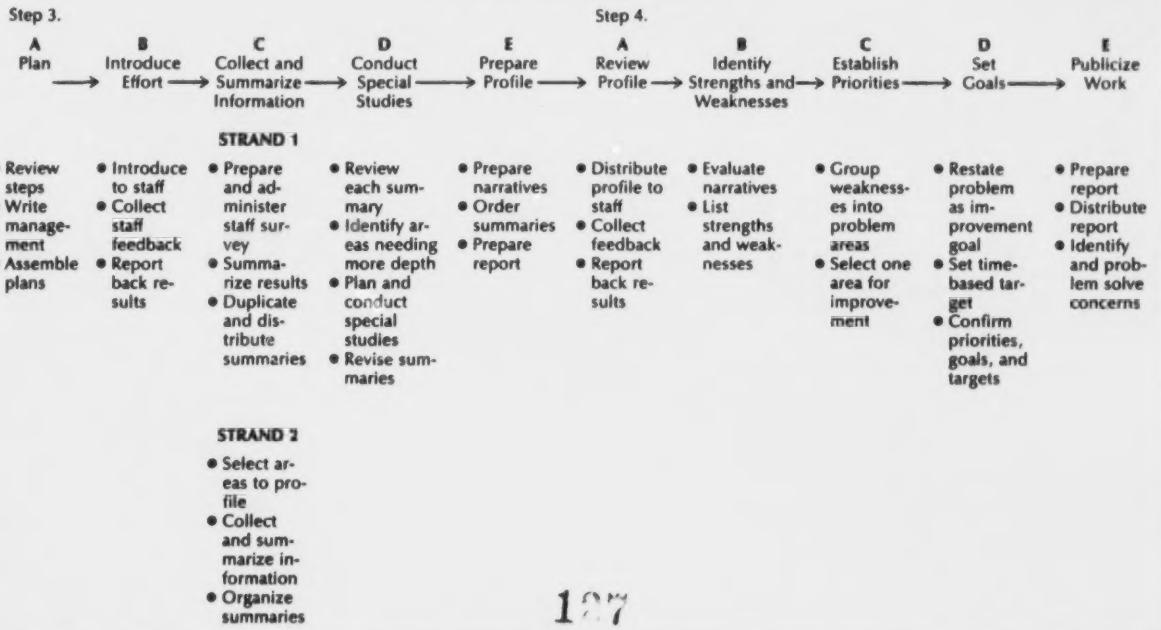
A collaboratively developed school profile aids staff members in targeting needed changes in student achievement, attitude, and behavior.

School improvements should be aimed directly at improvement of student performance—academic achievement, social behavior, and attitude—or they may miss the mark. The Goal Based Education Program at the Northwest Regional Educational Laboratory (NWREL) has developed a process called *profiling* that is used to gather information about student performance. The resulting profile can then be used as the basis for planning and implementing improvements.

Robert E. Blum is Director and Jocelyn A. Butler is Development/Dissemination Specialist for the Goal Based Education Program, Northwest Regional Educational Laboratory, Portland, Oregon.

Profiling is part of an overall school improvement program called Onward to Excellence. Schools in the Onward to Excellence program contract for training and technical assistance for a

Figure 1. Profiling Overview.


Step 3.
Step 4.
A Plan
B Introduce Effort
C Collect and Summarize Information
D Conduct Special Studies
E Prepare Profile
A Review Profile
B Identify Strengths and Weaknesses
C Establish Priorities
D Set Goals
E Publicize Work
STRAND 1
• Review steps • Write management • Assemble plans
• Introduce to staff • Collect staff feedback • Report back results
• Prepare and administer staff survey • Summarize results • Duplicate and distribute summaries
• Review each summary • Identify areas needing more depth • Plan and conduct special studies • Revise summaries
• Prepare narratives • Order summaries • Prepare report
• Distribute profile to staff • Collect feedback • Report back results
• Evaluate narratives • List strengths and weaknesses
• Group weaknesses into problem areas • Select one area for improvement
• Restate problem as improvement goal • Set time-based target • Confirm priorities, goals, and targets
• Prepare report • Distribute report • Identify and problem solve concerns
STRAND 2
• Select areas to profile • Collect and summarize information • Organize summaries

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year to learn and implement an improvement process based on the results of effective schools research as synthesized by NWREL staff. The program provides a ten-step process whereby schools collegially use data to set goals for improvement:

1. Introduce the program to all school staff members, form a leadership team (the school principal, staff teachers, and a central office representative) to head efforts, and set the stage for improvements.
2. Study the effective schools research base and findings.
3. Profile current levels of student performance (academic achievement, social behavior, and attitude).
4. Set a goal for improvement.
5. Check current instructional practices.

Figure 2. Profile Contents Menu.

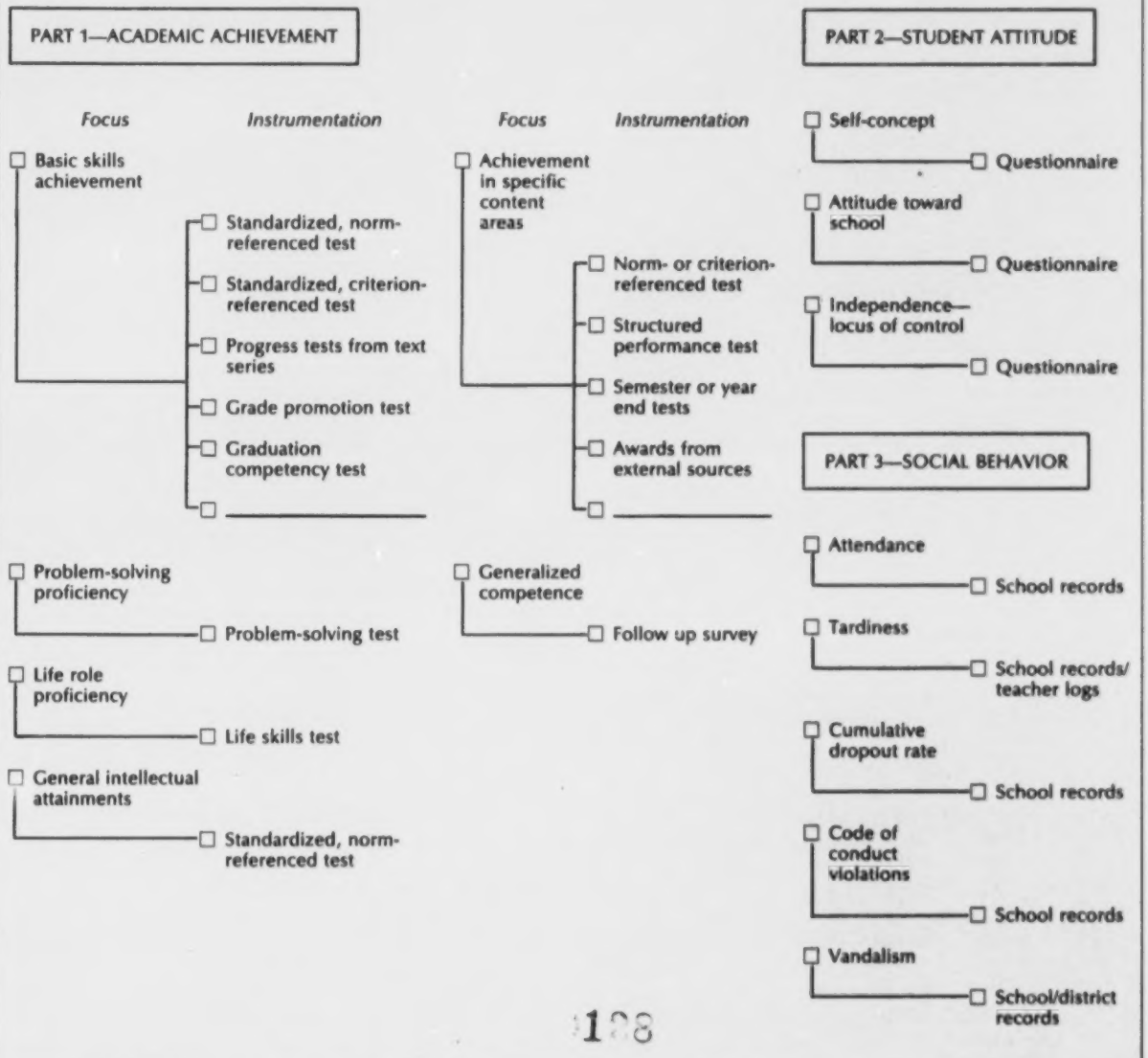
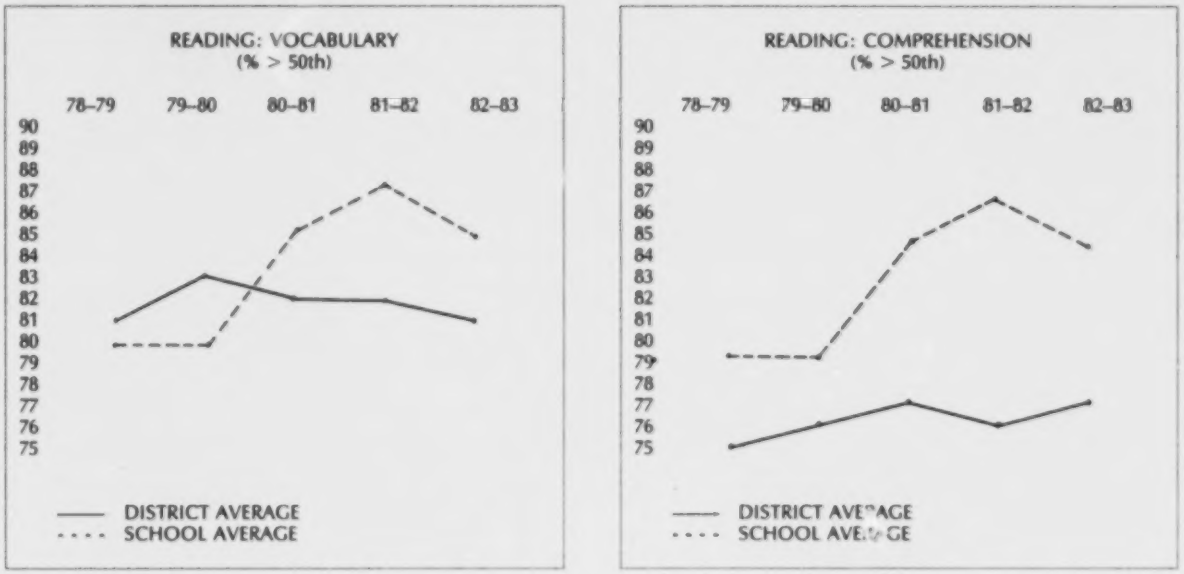


Figure 3. Achievement in Reading.



Narratives

1. The percentage of 7th grade students in the district scoring above the 50th percentile in reading/comprehension skills has increased by 2 percent since 1978–79; and the percentage of those students at this school has increased by 8 percent over the same time period.
2. The percentage of 7th grade students in the district scoring above the 50th percentile in reading/vocabulary skills increased from 1979–80 to 1978–79 by 2 percent and declined between 1979–80 and 1982–83 by 2 percent; the percentage of those students in this school increased overall by 5 percent between 1978–79 and 1982–83.
3. In both skill areas, there was a steady increase in the percentage of students scoring above the 50th percentile over a three-year period between 1979–80 and 1981–82; there was a decline in both skill areas in 1982–83.
4. The percentage of students scoring above the 50th percentile in both skill areas at this school is higher than that percentage in the district.

6. Develop a research-based prescription to meet the improvement goal.
7. Prepare for implementation.
8. Implement the prescription.
9. Monitor implementation.
10. Evaluate progress and renew efforts.

All improvement efforts in the Onward to Excellence program focus on student performance: the indicators of school improvement are changes in student achievement levels, behavior, and attitude. NWREL's experience has shown that team-based improvements are effective in achieving the cooperative, schoolwide efforts necessary to plan and implement lasting change. Local schools develop their own resources for improvement; and the process becomes an ongoing approach for managing local school improvement efforts.

Profiling a School

Profiling takes place in steps three and four of the process. In step three, school teams plan for profiling, introduce the process to staff, collect and summarize schoolwide data, and prepare a written report, or *profile*, of the school. In step four, the school reviews the profile to identify strengths and weaknesses in student performance; set priorities for improvements; establish goals; and describe profile results and goals to the school community. Planning and implementation of improvements are then based on profiling results. (See Figure 1 for an overview of the profiling process.)

Profile preparation involves the two major tasks of collecting and summarizing information and preparing a written version of the findings. Both tasks involve a number of steps that should be managed through planning and assigning specific tasks to team members. In addition, it is crucial that all staff members be informed of the profiling effort and that information collection be focused on creating a picture of the school as a whole. Schoolwide data are needed, not to monitor individual teacher or student performance, but to bring about schoolwide improvement.

Collecting and Summarizing Information

After the leadership team is formed and has become familiar with the overall thrust of the improvement program, they begin planning to collect current data on the school. Using a Profile Contents Menu (Figure 2), team members discuss types of infor-

mation they will collect. The menu has three sections, each dealing with one area of student performance: academic achievement, student attitude, and social behavior. To achieve an overall view of students in the school, teams should collect at least one group of data in each of the three sections.

Using the Menu as a worksheet, teams check off data sources already available to them. Results of achievement tests, attendance records, and student attitude surveys, for example, are readily available in many schools. Team members then note areas where additional data would be useful. Using group decision-making techniques, the team considers available and desirable data and creates a firm list of items to collect for the profile. Team members are then assigned specific tasks for data collection, creating a plan for managing the profiling effort.

With the management plan and selected data sources in hand, the team presents the improvement program, the profiling process, and the profiling areas to the entire staff. This action both introduces the effort to the staff and provides a means to collect staff feedback on the profiling process. Following the management plan, the team collects and summarizes data in the selected profiling areas.

Preparing the Profile

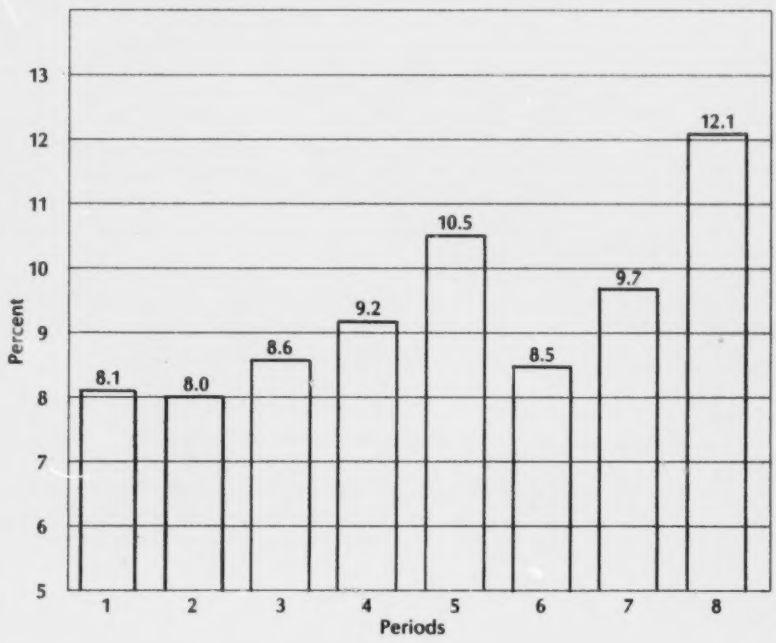
Team members next make decisions about the appropriate display of data and who among them will complete individual displays. Each type of information is to be displayed on a single sheet of paper that can be used as a quick reference.

Once data have been summarized and displayed appropriately, team members prepare narrative descriptions of each summary, listing indicators of student performance represented by the data. Narratives are simple, declarative statements in plain language and avoid educational or testing jargon. Narratives describe but do not evaluate information contained in the data displayed and focus on key summary results, highlighting the most important aspects of student performance data. Team members write only a few statements that may be revised before the team finally settles on the exact wording. Data summaries may take one of several forms, including charts, graphs, and tables. Figure 3 is an example of data showing achievement in reading, and Figure 4 shows school attendance fluctuations.

Team members collect and organize these one-page data summaries into a single document, prepare a cover and an introduction, and print and distribute copies of the profile to all staff members for discussion. By covering several key areas, the team draws a current picture of student performance on a schoolwide basis.

Figure 4. Example of a Data Summary.

Attendance per Class Period Grading Period 3



Narratives

1. The highest number of absentees occurs in the final class period of the day.
2. There is a higher percentage of absentees in periods directly before and after lunch than in morning class periods.
3. Overall, more students are absent in the afternoon than in the morning.

Using Data for Goal Setting

The completed profile becomes a tool for setting schoolwide improvement goals, as the leadership team directly involves the whole staff in generating a school improvement goal from the data already collected and compiled. The leadership team distributes copies of the profile to all staff members for consideration and evaluation in a final survey before making improvement goal decisions.

The profile evaluation process solicits feedback from all staff members. Staff members are asked to fill out individually the Profile Evaluation Worksheet (Figure 5) for compilation by team members as they prepare to set the school's improvement goal.

Staff members rate each narrative statement in all profile summaries on four bases:

1. Degree of *relative satisfaction* with the current picture of student performance, using a 10-point scale, from -5—very dissatisfied with result,

Figure 5. Example of a Profile Evaluation Worksheet.

AREA						
Achievement	Behavior	Attitude	NARRATIVE	Satisfaction Rating	Importance Rating	Acceptable Standard
			Overall, 9 percent of students are absent from one class period each day.			
			The highest number of absentees occurs in the final class period of the day.			
			There is a higher percentage of absentees directly before and after lunch than in morning class periods.			
			Overall, more students are absent in the afternoon than in the morning.			

Figure 6. Goal Setting Worksheet.

AREA					PRIORITY			
Achievement	Behavior	Attitude	Goal and Target	Current Results and Standard	High Priority	Moderate Priority	Low Priority	Short-Term Target
			Improve daily student attendance.	Currently, 91 percent of students attend all courses; the standard is 97 percent.				

nearly all students need improvement—to +5—very satisfied with result, nearly all students doing well in this area.

2. *Relative importance/priority for improvement* among areas with which staff members are dissatisfied, using a scale from 1, low priority, to 5, high priority.

3. *Acceptable standard of performance* in areas of least satisfaction, which would constitute "good" performance for students and result in a *high satisfaction* rating—a realistic, long-range standard to aim for in this area.

4. *A specific target for improvement*—staff members select from among all identified areas for improvement one or two short-term, time-based targets that are of *high priority*.

Using this feedback from the staff, the leadership team fills out a goal setting worksheet (Figure 6), restating narratives on problem areas as improvement goals and establishing standards of performance for those areas. After assessing priorities, the team selects one or two areas and sets a time-based target for improvement. They then report the improvement goals and targets to the staff, students, and community.

In this way, the profile becomes a tool for setting one or two improvement goals. The leadership team then works through the rest of the Onward to Excellence program to plan a prescription for improvement, prepare for and implement the prescription, monitor implementation, and evaluate progress toward reaching improvement goals. Underlying all decisions is a firm knowledge of baseline data about current student performance in the school.

Once the cycle of improvement is completed, schools can again profile the school, use new data to target another improvement goal, and follow the process to plan for and monitor improvements. The cycle becomes a school-based method for managing improvements based on regular collection and analysis of data on student performance.

Profile Checklist

The school profile provides baseline data about student performance against which effects of school improvements can be measured. This information becomes a primary tool in planning and managing targeted school improvement efforts.

There are several important factors to consider when creating a school profile:

- The profile describes student performance on a schoolwide basis.
- All students and all curriculum areas should be represented in the profile; the more comprehensive the profile, the more broad-based and complete school picture emerges.
- By creating a profile, it is possible to sharpen focus both on strengths and weaknesses in student performance.
- The profile is a snapshot of the school. It can become the first in a series that can be followed, perhaps annually, with updating and new improvement decisions.

Above all, the profile is a decision-making aid. Knowing specific information about student peformance facilitates targeting goals and planning for improvements in student achievement, behavior, and attitude.□

To learn more about the Onward to Excellence Program, call (503) 248-6800 or write to Robert E. Blum, Director, Goal Based Education Program, Northwest Regional Educational Laboratory, 300 S.W. Sixth Ave., Portland, OR 97204.

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Anticipating and Managing Change in Educational Organizations

By systematically scanning a variety of sources, administrators can keep up with—and even conquer—the information deluge.

WILLIAM L. RENFRO AND JAMES L. MORRISON

The last two decades brought great acceleration in change, and the years ahead will bring even more. Increasingly this accelerating change has come from developments in the external environment—the environment in which our institutions must survive and thrive. Thus, anticipating and responding to change is a major responsibility for all institutions.

Although changes may seem to come upon us without warning, experience shows this is rarely the case. Unfortunately, we often disregard or misinterpret the signals of change. We tend to spend our time on issues we perceive to be most important right now; we fail to scan our surroundings for changes that are in the early stages of development. The flood of problems that forces us into crisis management makes concern for emerging issues appear to be a luxury. It is not. It is a necessity.

Even though the signals of change are available to us, separating them from the tremendous amount of "information noise" is almost overwhelming. Another difficulty lies in the human characteristic of not seeing what we do not want to see. We quickly filter out of the noise the signals that confirm our established positions and ideas. We also block out information that forces us to rethink ideas, opinions, and attitudes, or that forces us to adapt to change. The scanning process is an organized, conscious struggle against these human characteristics and limitations.

The Blinders We Wear

Missing important signals of impending change is a natural consequence of the way we conduct our daily affairs. Since most organizations have no formal scanning function to look at the external environment, they implicitly rely on the information flowing to their administrators. Surveys conducted of the external information resources used by executives in business, government, and professional associations always come to the same astounding conclusion: everybody uses the same information resources. They typically review a weekly news magazine, a major national newspaper, a local newspaper, one or two publications focused on their profession, business, or industry, and see TV national network news and news magazine programs. Virtually no one reads *Working Woman*. Virtually no one reads *Sierra*. Virtually no one reads *Ebony, Savvy, High Times, Young Miss, Mother Jones, Teen, The Futurist*, or any of the other literature reporting on, advocating, or involved in change. We would never consciously design an information system around a few mainstream resources—but that is what we have done.

In spite of the narrow base of our information resources, many of the important changes facing us in the future are known to the leadership of organizations. If we were to ask: "What issues face our present or planned operations that you believe will demand a response in the future and that have not yet begun to receive any significant attention," we would receive a flood of information. This raises two issues: how can this information be systematically fed

William L. Renfro is President, Policy Analysis Company, Inc., Washington, D.C.; and James L. Morrison is Professor of Education, The University of North Carolina at Chapel Hill.

into the organization and how can the quality of the information be improved?

We will briefly describe the design and operation of an environmental scanning system and then illustrate how a school system can use the results to avoid some crises and have more lead time for crises that cannot be avoided.

Developing a Scanning System

One individual can set up a scanning system, but it is better if several top administrators work together. There are two main reasons for this. First, only those with a broad view of current operations and future directions of the school system as well as its capabilities for responding can evaluate the potential importance or relevance of emerging issues. Second, the problems of achieving the necessary communication, recognition, and acceptance of information about change in the external environment are minimized. If the scanning task is delegated to a single person or a group of experts in an external service, the results of scanning can easily be ignored or their use postponed. If top administrators are personally involved, reporting and organizational problems are minimized.

Finally, the scanning process encourages a kind of thinking among the leadership of an organization that is needed and valuable. This continuous searching for and questioning of the interconnection of events and of the potential importance of external developments encourages a new process and approach to problems that can be valuable in other management decision-making processes.

There are only a few basic design requirements for a scanning system. The first step is to determine the areas that need to be scanned. This list should include issues in each of four areas—social, technical, economic, and legislative/regulatory developments. The 20 to 30 issues that would be developed from the survey might be organized into groups to identify the 10 or 15 issue areas that will be covered by scanning. Several specific issues might all belong in a general issue area such as minority rights, environmental quality, computers/communications, and so forth. (This list will change as new areas surface.)

The next step is to create a set of files around these issue areas. Then the information resources that are covered need to be matched against the list of issue areas to ensure that each area is covered. Each member of the scanning group is assigned one or more of these specific resources to scan. National news magazines will, of course, eventually cover all issues that reach a certain threshold of importance. While they provide an excellent general resource for areas that do not justify a separate file, they are not adequate for areas that are to be scanned. These general resources are extremely important since the appearance of an issue in them signals its growth and spread to a larger audience. But for resources that will identify emerging issues, specialized publications must be used. The particular publications to use depend on the specific issues.

What to Scan?

Specialized magazines, periodicals, newsletters, and news sources in each of the four major areas should be scanned. A special effort should be made to include public opinion polls on all available issues. It is almost a requirement that a scanning system include a file on public opinion and that all opinion polls be included, no matter what the issue (an excellent source is the American Enterprise Institute's *Public Opinion* magazine.) Of course, newspapers constitute a major scanning resource. Indeed several national newspapers should be scanned on a continuing basis since each newspaper has its particular focus and biases. Usually these include the *New York Times*, with its focus on international affairs, the *Washington Post* or *Washington Times* with their focus on domestic political developments, the *Chicago Tribune*, with its focus on the midwest, the *Los Angeles Times*, with its west coast perspective, and one of the major papers from the sunbelt—Atlanta, Houston, or Miami. Perhaps the best newspaper for scanning is *U.S.A. Today* with its emphasis on factual news rather than analysis and opinion. The *Wall Street Journal* continues to be one of the best newspapers in the country for identifying emerging issues.

Using Scanning Results

Periodically all of the materials that come into the scanning system need to be reviewed, organized, analyzed, and evaluated. Even a small scanning system can, in a couple of months, produce a hundred or more items. The chief scanner's job is to review this material and organize it into the specific issues that are identified—usually not more than 30 new issues. For example, scanning by the Policy Analysis Company recently found several items concerned with known or suspected carcinogens in school facilities and associated interior air quality standards. The sources of these items ranged from proposed legislation to planned medical research, to discussions with an expert, to a policy statement by the Association of Heating, Air Conditioning, and Environmental Control Contractors. All of these items pointed to a single issue.

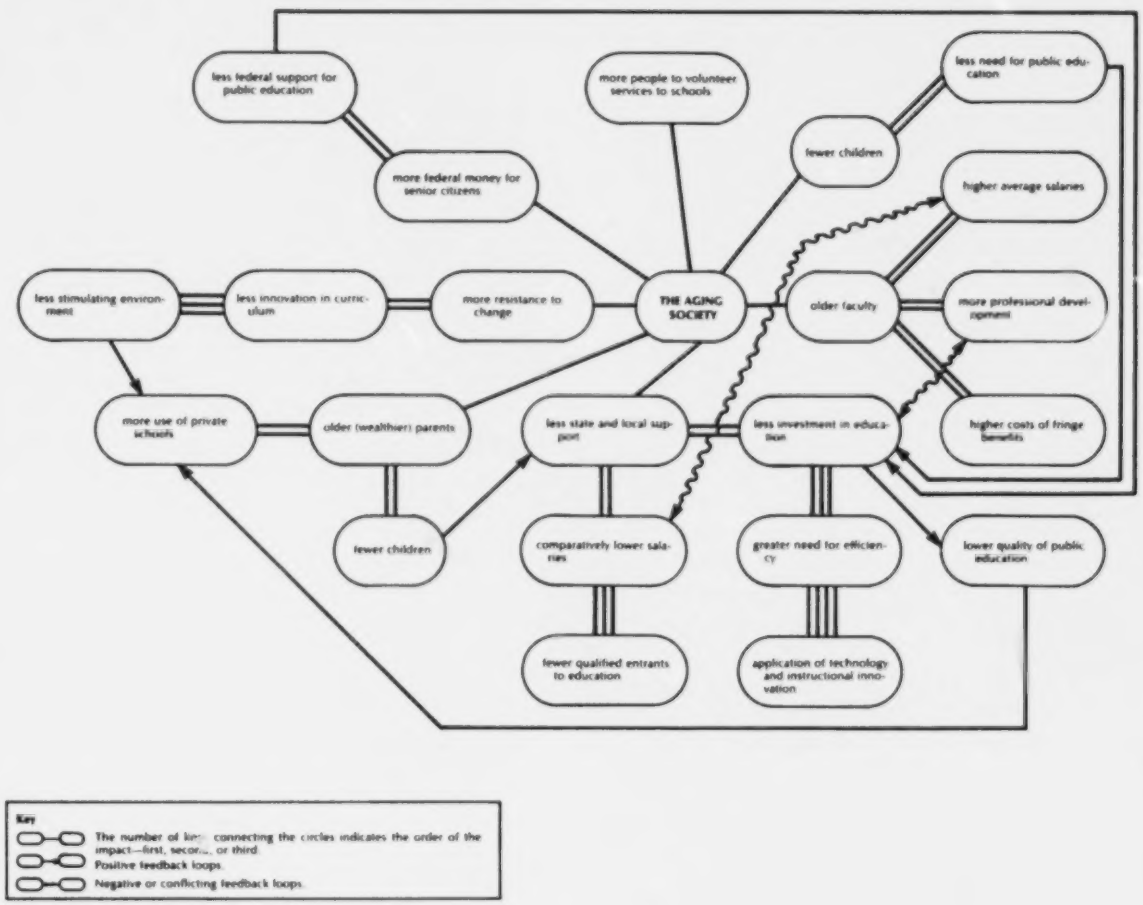
Analyzing Impacts

When the scanning categories have been organized, some understanding of the potential impact of each issue must be developed. One technique is to sharpen the issue into a scenario. For example, suppose the screening committee discovered forecasts that its region would be at the leading edge of the national trend toward an aging society. This might be stated: the average age of the regional population will increase by 10 years. The emphasis at this stage should not be on the likelihood of this happening, but rather on what the consequences would be if it were to happen. Indeed, the next question is, "What would happen if . . .?" Here, the search is for first-order or direct effects if the starting event occurred. When five or six direct impacts have been identified, the "what if" process is repeated for each of the first-order impacts. This enables us to identify second-order effects.

The rule of this process is that any possible impact is acceptable. As this is a brainstorming session for understanding the importance of an issue, the fact that an impact is small or unlikely is no reason to exclude it from consideration. The only reasonable limit is the size of the diagram created from this exploration of effects. Typically, third- and fourth-order impacts are sufficient to explore the full context of the impact of an issue. The resulting diagram is known as an *impact network*.

Figure 1 shows an example of an impact network for the aging society. There are both positive and negative implications for public education. On the one hand, the demands of parents of the relatively fewer children who are in school seem likely to increase while the

Figure 1. Impact Network of the Aging Society


less federal support for public education
more people to volunteer services to schools
less need for public education
fewer children
more federal money for senior citizens
higher average salaries
less stimulating environment
less innovation in curriculum
more resistance to change
THE AGING SOCIETY
older faculty
more professional development
more use of private schools
older (wealthier) parents
less state and local support
less investment in education
higher costs of fringe benefits
fewer children
comparatively lower salaries
greater need for efficiency
lower quality of public education
fewer qualified entrants to education
application of technology and instructional innovation
Key
The number of lines connecting the circles indicates the order of the impact—first, second, or third.
Positive feedback loops.
Negative or conflicting feedback loops.

vast majority of adults either do not have children or are no longer parents of a school-age child. A recent edition of the *American Journal of College Health* estimates that the majority of adults—as many as 64 percent—do not have children of school age (Nadelson, 1983). Major impacts of the aging society will be relative declining salaries of school teachers, particularly starting salaries. The effect of most of the feedback loops is to aggravate the problems focused around decreased support. However, there are some positive factors resulting from an aging society. For example, schools may receive increased volunteer support in the classroom in the form of teacher aides or teachers of specialized subjects. Moreover, cutbacks in funding may also have positive third- and fourth-order effects: they will necessitate more efficient use of resources, an efficiency that may be met by application of educational technology, thereby stimulating instructional experimentation and innovation.

Setting Priorities

When the impact networks have been completed for each issue, the scanning group is ready to move on to developing and evaluating relative priorities. Again, for simplicity, a simple technique can be used to organize and structure this process. For each issue, each member of the committee is asked to make two independent decisions. First, what is the probability or likelihood that the issue will develop in the next five to ten years? And second, what is its impact (on a scale of 1 to 10) if it were to develop? These two judgments are the coordinates of a point on a graph. A sample probability-impact graph is shown in Figure 2.

When evaluating the probability and impact of each issue, the group needs to employ the rules of democracy—everyone gets to vote anonymously. Usually each member of the group will have an impact graph for each issue. When everyone has voted, the graphs are collected and the results collaged onto a single chart. The resulting scatter of the votes graphically shows the opinion of the group. If the votes are clustered in such an area that it is reasonable and practical to average them as an expression of the group opinion, then additional voting may not be necessary. If

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the group feels that more discussion is needed, then additional rounds of anonymous voting with feedback of the group opinion should follow. Typically the chief scanner will guide the group through a discussion of the various possible reasons for extreme votes that appear in group response. Thus the question is not, "Who said this is unimportant?," but rather, "Can someone imagine the rationale of a person who thinks this is unimportant?" The value of anonymity continues.

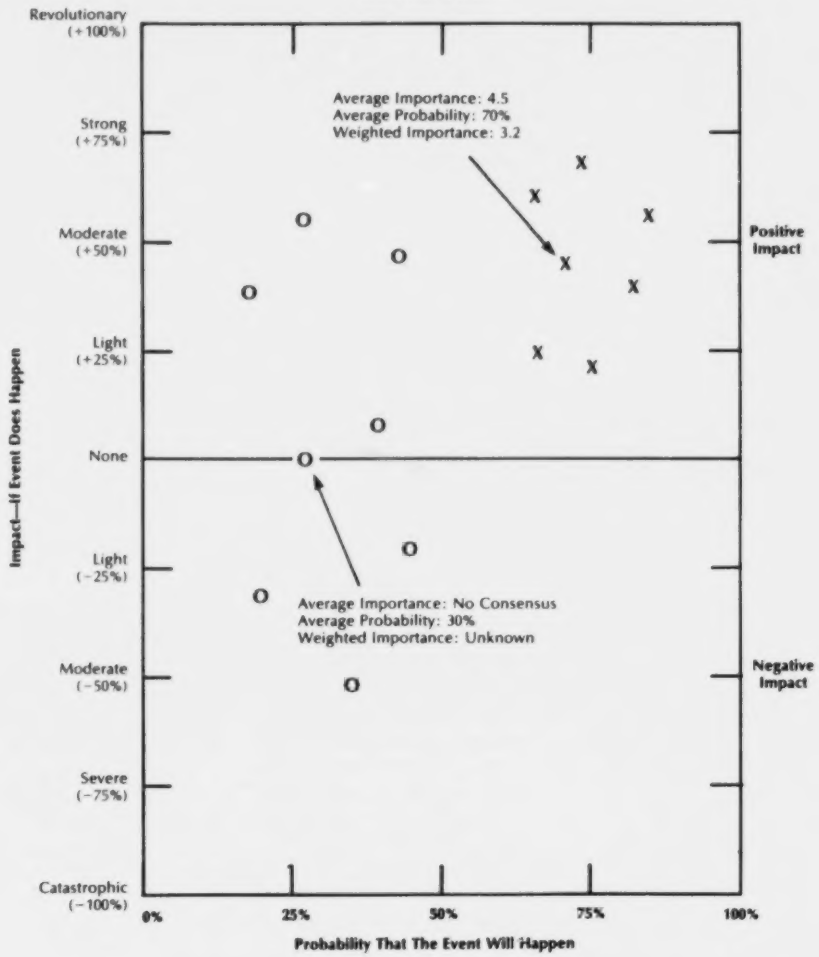
When the probability-impact charts have been prepared for all issues, the issues can be ranked according to the product of probability and impact. This is shown in Figure 2[1] where there is reasonable consensus about both the probability and the impact. The weighted importance is 3.2 (70 percent times 4.5). The "0" event on the other hand, shows some consensus about the probability—low—but little consensus about whether the impact is positive or negative. The "0" event needs to be recycled for additional discussion, voting, redefinition, and so on. The process of sequential anonymous voting with group feedback is known as the Delphi technique.

If the number of issues to begin with is very large, then it may not be practical to prepare an impact network for every event. An initial screening through the use of a probability impact chart may be valuable to reduce the number of issues to manageable size as determined by resources available to the committee. This manageable set of issues then proceeds through impact network and the probability-impact graph stages.

Using the Scanning System

The scanning system has now produced an extremely interesting document: first, an ordering of external events in terms of their potential importance to

Figure 2. Probability Impact Chart Summarizing Seven Votes for Two Different Events.



X's show consensus about a very probable event with high, positive impact.
O's show an event with consensus on probability (low), but not on impact.

"The purpose of the scanning system is to alert the organization to its own best thinking, which may provide opportunities or threats."

the school system; second, an analysis of the kinds of effects each event could have—the impact networks; third, selected clippings from the scanning file showing the source and background of the issue. This document now provides important information for the strategic planning process of the school system. Issues within the control of the school system should be added to the agenda of strategic planning. Issues not within its control should be added to the planning assumptions used in strategic planning. Of course, specific issues might be directed to their corresponding departments—affirmative action issues to personnel, student issues to the dean, and so forth. To facilitate the use of these results, many scanning systems in the business community publish newsletters to distribute throughout the organization. These newsletters identify and discuss the issues identified in scanning as well as the impacts developed by the committee.

Dividends

The purpose of the scanning system is to alert the organization to its own best thinking about emerging issues, which may provide opportunities or threats. It does this through an orderly system of organizing resources to anticipate and respond to these issues. Few if any school systems have established scanning committees to the extent described in this paper, probably because developing such a committee requires expenditures of time, energy and money. One way a district may reduce this expense is to involve faculty members. Another way would be to establish a consortium linked through electronic mail in which the scanning task can be shared. Whatever the cost, establishing a scanning process within a school system will pay dividends in that system's ability to anticipate and manage change.□

[1]This chart is from Renfro, W. L., and Morrison, J. L., "The Scanning Process: Getting Started," in *Applying Futures Research in Institutional Research*, New Directions in Institutional Research Number 39, (San Francisco: Jossey-Bass, 1983).

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Successful in Japan and involve staff members in Qua IN

If educators are to have some leverage in increasing productivity and quality in America's schools in the next few years, we must focus our energies on the most potent and expensive resources under our control—the people who work in our schools.

There are many methods school administrators can use to accomplish this goal. One possible approach—the quality circle—has been credited by observers of Japanese industry as being a key component in increasing employee productivity. In the United States, the concept has already moved from industrial settings to banks, hospitals, government, and service organizations. By spring 1983 over 4,000 organizations will be implementing quality circles.

The quality circle is a participative management tool designed to systematically harness the brain power of employees to solve an organization's problems of productivity and quality. While there are certainly many differences in the ways industry and education operate, they do share one attribute: the public distrusts the quality of their products. Whether it is American cars or American high school graduates, both are perceived as not as good as they used to be.

As yet, few school systems have used the quality circle concept. However, a growing number of school administrators are tentatively examining its tech-

Larry Chase is Executive Director, Northwest Educational Cooperative, Arlington Heights, Illinois.

in American industry, quality circles are a specific way to solving organization problems.

lity Circles

Larry Chase

E D U C A T I O N

niques and values to discover if it can be used to reduce the costs of education and improve the morale and productivity of teachers, administrators, and others involved with the school enterprise.

Whether or not the quality circle will have the kind of success in public school settings that it is producing in a large section of the American business establishment remains to be seen. That the technique is worth investigation and study is beyond question.

How Quality Circles Function

A quality circle is a small group of employees (5–12) who voluntarily meet on a regular basis to identify, analyze, and solve various problems. Ideally, members of each circle should be from the same work area, do similar work, or interact closely to get a particular job done so that the problems they select will be familiar and important to all of them. There is no limit to the number of circles that can be created within an organization. Typically, circles meet for an hour a week, but this may be changed based on local circumstances. Once trained, circle members go through specific steps to accomplish the goal of the circle. Figure 1 reflects this process.

In conducting quality circle workshops for school administrators, I'm sometimes confronted with skepticism that the concept is really anything new or better than the participative management processes that schools are currently using. For instance: some administrators say, "Perhaps this technique has some value on the assembly line where managers have never asked anybody's opinion before, but I often involve my staff in planning and decision making."

Figure 1. How a Quality Circle Operates.

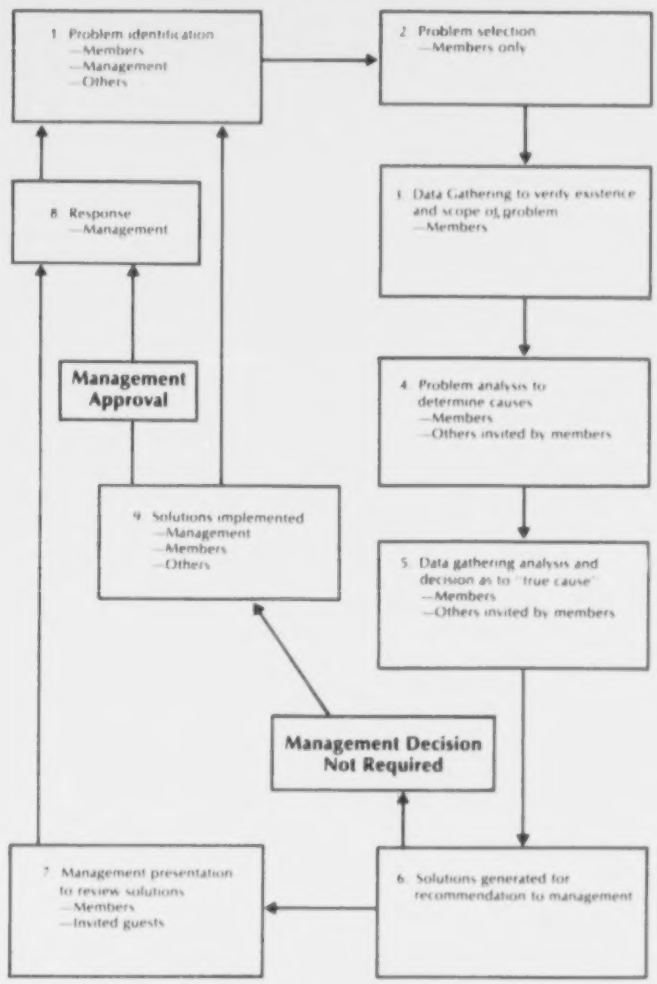
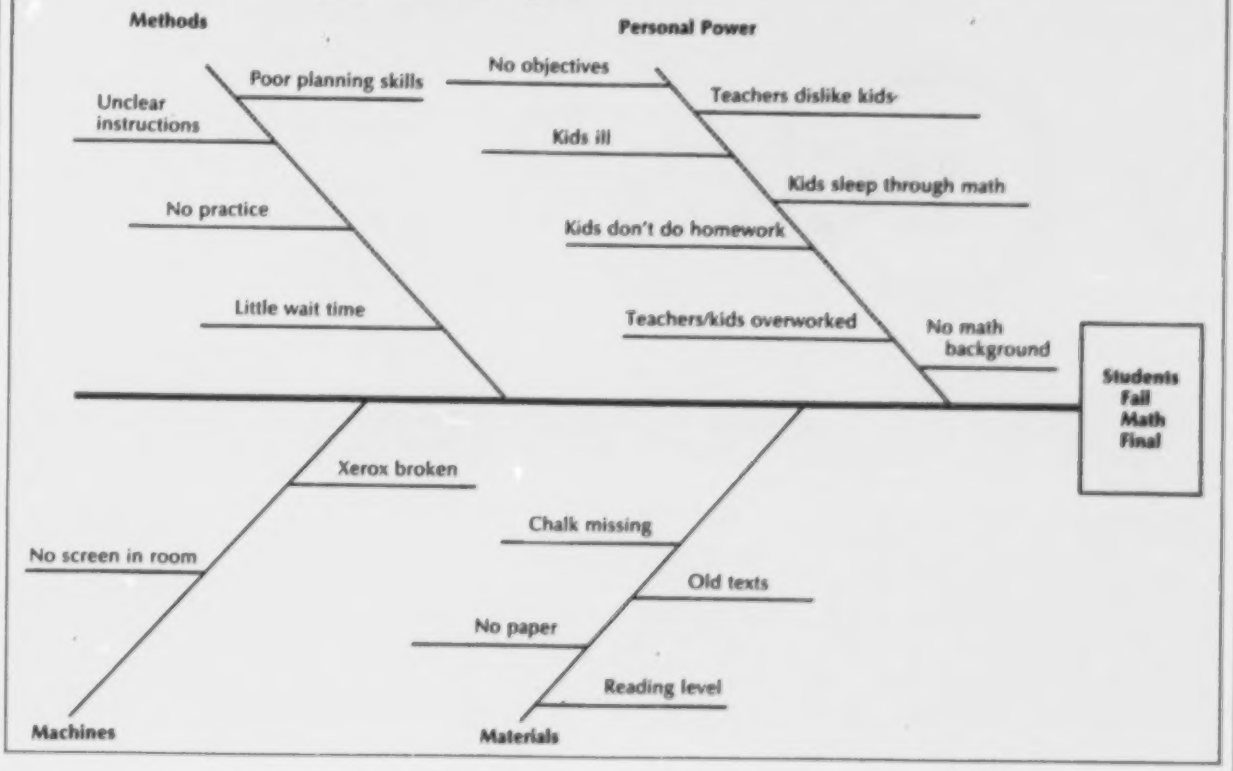


Figure 2. Fishbone Diagram.



My response to this legitimate defense is to challenge the skeptic to understand the integrity of the quality circle tool and to consider the effects of the disciplined, almost ritualistic, principles that make it a quality circle. Regardless of what a school administrator calls the process, if it is consistent with all of those principles it will function like a quality circle.

Quality Circle Techniques

Quality circles are *very* different from the task forces and committees typically used in education. Quality circle leaders and members are trained in the specific language and procedures of the circle process. These techniques are used at each step of the quality circle process to achieve the results of that step. There are eight separate techniques.

1. *Round Robin Brainstorming.* Most educators are familiar with brainstorming. When managed properly, a brainstorming session produces the maximum number of alternative ideas on a given topic. It increases the originality as well as the quality of ideas. The rules for brainstorming are very specific and are designed to eliminate ego involvement and negative feelings that might interfere with the generation of many ideas. Brainstorming allows participants to break out of their normal conceptual limits to think of possibilities they would not normally consider. The round robin structure also guarantees increased participation of all of the members in the group rather than domination by a few individuals.

The purpose of the brainstorming session, which is used in every step of problem solving, is to produce a large quantity of ideas before narrowing to the best ideas.

2. *Voting to Achieve Group Consensus.* Educators know the value of achieving consensus, and they know it is a time-consuming process, which is why it's rarely used in schools. The circle voting technique to achieve consensus is an efficient procedure that works well in any consensus-seeking situation, not only in quality circles.

There are two levels of voting in this process. During the first vote, circle members raise their hands to indicate which ideas generated in the brainstorming session warrant further consideration. Individuals are allowed to vote for as many ideas as they wish. The number of votes for each idea are tallied and those ideas receiving no votes are eliminated from further consideration. The remaining ideas are reorganized according to priority; those getting the most votes are ranked highest.

Next, group members discuss the ideas to clarify their interpretation of them. Individuals who feel strongly about the importance of promoting one particular idea are given an opportunity to convince other members of its worth. The group is reminded that the consensus model requires the participation of all members equally rather than allowing a few verbal or articulate people to dominate the decision process. When this discussion phase is completed, the group votes again. During this step the number of times an individual can vote is limited by the number of ideas. Typically, if five ideas remain, each member gets one vote. If ten ideas remain, each member gets two votes. This process forces group members to choose from among alternatives to determine which ideas have maximum support. Through this process the ideas are reordered and the ones at the top of the list are now accepted for further consideration. Other ideas are kept for later consideration. Typically, brainstorming and voting are used at steps 2, 4, and 6 of the problem-solving process.

3. *Cause and Effect Analysis.* There

are many cause-and-effect analysis systems. Each system provides a rational structure through which data are manipulated to determine the "true" cause of a particular problem. The method most often used in quality control circles is the fishbone technique. Circle members fill in a fishbone diagram, beginning with a statement of the problem—the effect—in a box on the right side of the diagram. Possible causes of the problem usually fall into one of four categories: methods, machines, materials, and people power. As group members think of what might have caused the problem, their ideas are added to the diagram in the appropriate categories. The fishbone diagram in Figure 2 gives a sense of the way data are organized by this structure.

Other cause-and-effect formats include work flow analysis, force field analysis, process cause-and-effect analysis, job target analysis, and so forth. Before a cause-and-effect analysis tool is adopted by a circle, group members must be thoroughly trained in the exact application of the model.

4. *Data Collection.* In certain stages of the quality circle process data collection and verification become very important. At these times circle members call on any and all data gathering tools and techniques that can serve the purpose at hand. Which tools and techniques are chosen depend on the data that are needed to analyze a particular problem. Typically data gathering involves the use of check sheets, checklists, surveys, sampling techniques, graphs, and simple statistical techniques like mean, median range, frequency distribution, inferential data analysis, and so on.

Examples of Check Sheets
Case 1

A. Problem Identified: Teachers feel threatened by clinical supervision program.

B. Major Causes Analyzed:

1. Teachers fear supervision is really evaluation.
2. Teachers don't understand the new teaching methods.
3. Principals lack communication skills.
4. Conference time is insufficient.
5. Inservice program lacks practice time.
6. Other.

	Elem. Bldg.1	Elem. Bldg.2	Elem. Bldg.3	Jr. Hi. Bldg.	Hi. Sch. Bldg.	Total
1. Principal's supervision is evaluation	xxxx xxx	xxxx xx	xxxx x	xxxxx xxx	xxxxxx xxxxxx	38
2. Don't understand methods	x	xx		xxx	xxxx	10
3. Principals lack communication skills	xx	x	x	xxx	xxxxx	12
4. Conference time is insufficient		xx			x	3
5. Inservice program lacks practice time	x		x	xx	x	5
6. Other	x	xx	x	x		5

Case 2

A. Problem Identified: Student reading levels deteriorated in 8th grade.

B. Major Causes Analyzed:

1. Entry skills are lower with more transient population.
2. Less time spent on reading skills in content area.
3. Lack on coordination among staff on remedial methods.
4. Teacher expectations are lower.

	(1)	(2)	(3)	(4)	Total
1. Lower entry skills	xx	x		xx	5
2. Less time spent on reading skills	xxxx xx	xxx x	xxx x	xxx xxx	20
3. Lack of coordination	x			x	2
4. Lower teacher expectations	xx	x	xxx	x	7

While most educators have taken a course in statistics as part of their graduate preparation, few are truly trained at the routine application of statistical analysis techniques within their own jobs. One of the spin-off benefits of quality circle involvement is the opportunity to relearn useful statistical analysis, data analysis, and data gathering methods at a practical level.

5. *Decision Analysis.* Cause-and-effect analysis provides the data necessary to determine the most likely causes of a problem and the direction for data gathering and verification. Decision analysis is a systematic procedure for reviewing the results of data gathering and verification in order to determine if the hypothetical culprit or cause is the *actual* cause before solutions are considered. The decision analysis method used most often by quality circles is the Pareto Decision Analysis Technique, often referred to as the 80-20 method.

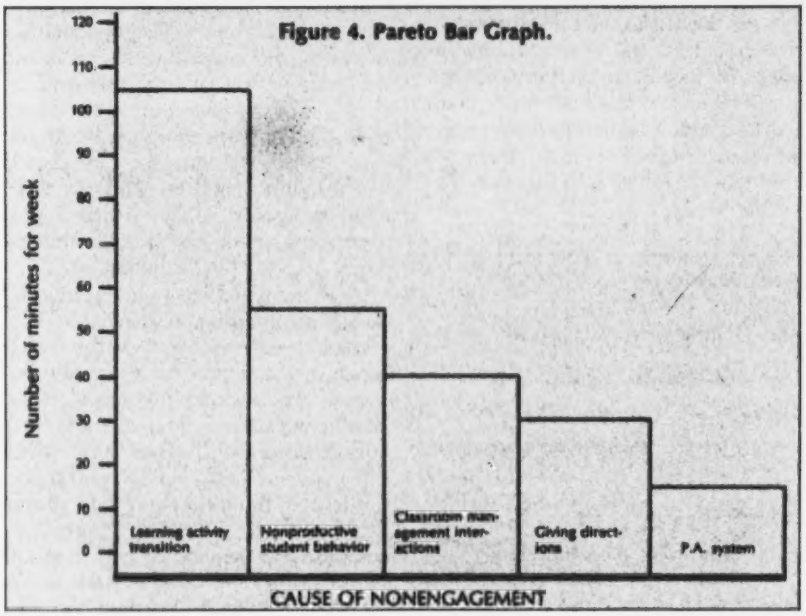
The Pareto method—named after the Italian economist and sociologist who created it—assumes that certain variables in any situation determine 80 percent of the results or nonresults, while all other variables combined account for only 20 percent of the results or nonresults. In time management workshops, this is often illustrated with the example that typical school administrators accomplish 80+ percent of their results in 20 percent of their time at work, while spending 80 percent of their time on activities that rarely produce significant results. Good time management realigns time spent with activities that will produce results. The Pareto chart is a bar graph arranged in such a way that the most likely cause of a problem appears significantly larger than all other possible causes. It can be an emotional moment in the quality circle process when the Pareto chart is finally completed and displayed for all to see. It is as if we had been on a hunting expedition for the one variable that is most important to alter. The Pareto chart visually verifies if the suspected culprit is the one in fact.

The following example illustrates the use of the Pareto decision analysis technique. A quality circle composed of intermediate grade teachers had identified the need to increase students' engaged learning time as the problem to be solved. During the data analysis process, they created a check sheet to identify various categories of interruptions of the learning process during prime morning

Figure 3. Barriers to Student Engaged Time.

	Mon. 9–11:45	Tues. 9–11:45	Wed. 9–11:45	Thurs. 9–11:45	Fri. 9–11:45	TOTAL
P.A. System	///	///	////	//	//// /	18
Learning activity transitions	//// //// //// ////	//// //// //// ////	//// //// //// ////	//// //// //// ////	//// //// //// ////	112
Classroom management interaction	//// /	//// //// /	//// //	//// ///	/////	37
Giving directions	/////	///	//// ///	//// /////	//// /	30
Nonproductive student behavior	//// ////	//// ///	//// ////	//// //// //	//// //// //// /	56
One tally mark equals one minute of nonengagement						

Figure 4. Pareto Bar Graph.



hours. After tabulating the number of minutes that students were off-task because of each category of interruption (shown in Figure 3), the data were arranged using the Pareto bar graph (Figure 4). This visual presentation of the data clearly showed that one type of interruption, "learning activity transitions," was by far the most significant barrier to increasing student academic learning time. From this analysis, circle members decided to generate solutions that would significantly reduce the loss of engaged time due to learning activity transitions.

6. *Generating Solutions.* All the quality circle procedures discussed so far are appropriate to use at the solution generation stage. In addition, a cost/benefit analysis is performed at this time. Cost/benefit analysis is a decision-making tool that helps the quality circle systematically determine cost and benefits of each proposed solution as well as the likely effect of each alternative. Through this process, a specific list of recommendations and an implementation plan emerge, which the group will present to managers of the organization.

7. *Management Presentation.* The purpose of the management presentation is to formally present the findings of the quality circle to the individual responsible for rejecting or accepting recommendations. Guests may also be invited. Much care goes into planning this presentation to ensure that the group gets the most leverage possible out of it. The tone of the presentation is usually formal. The presenter acknowledges anyone who helped the circle achieve its result and circle members themselves are acknowledged by management for their efforts in tackling the problem. Figure 5 is an example of a checklist one quality circle used to ensure a smooth management presentation.

Figure 5. Sample Checklist for Management Presentations.

10 Essential Points

1. Make Positive Statements
2. Use the Personal Viewpoint
3. Have a Leader
4. Use an Appropriate Meeting Area
5. Follow an Agenda
6. Follow the Chain of Command
7. Have a Theme
8. Keep It Short and Simple
9. Use Instructional Aids
10. Cover All Achievement, Progress, and Accomplishments

8. *Evaluation.* Like any self-renewing organizational process, the management presentation is followed by self-evaluation so that circle members can critique the way they functioned during the previous weeks or months. Upon completion of this phase the process begins again, with the group using problem identification techniques to determine what they'll tackle next.

These procedural steps are followed ritualistically, which ensures disciplined guidance for members during each step of the process. Time is used efficiently and groups are often surprised at how much they're able to accomplish in a short time compared to other forms of participative problem solving or decision making.

Examples of School Problems Appropriate for Quality Circle Processes

A broad range of problem areas could be addressed by a quality circle. Remember that while any member of the organization can suggest a problem to a quality circle group for consideration, the circle itself, through its normal process, determines what problems will be analyzed and solved. Administrators may not approve of the choices of a particular circle. Circle members may perceive that a problem affecting them in a minor but nagging way on a daily basis is more important than a problem critical

to the school district as a whole, especially in the beginning. Often, such decisions are made by circle groups to test the administrators' integrity and commitment. The group seeks assurance that it will be allowed to make its own decisions.

It is fundamentally important that groups be supportive in these decisions. A danger in the area of problem selection arises when administrators encourage circles to select only problems important to administrators. While those problems with the potential to save money for the organization *are* important to solve, solving problems that interfere with job satisfaction, employee morale, and general working conditions may be more important in the long run. Quality circles are a long-term change effort to increase the quality and productivity of the organization. They are not a quick fix nor a substitute for hiring effective managers, negotiating carefully with bargaining units, or supervising staff appropriately.

Typical Problems for Quality Circle Consideration

Teachers

- Improving student discipline
- Improving the use of materials, audiovisual equipment, or other school resources
- Scheduling of school activities that interfere with the learning process
- Increasing time on task with students
- Teaching certain difficult-to-teach students
- Relative amount of emphasis of different curricular areas
- Expectations regarding student performance
- Appropriate use of tests and other student evaluation methods
- Teaching skills and the need for staff development to upgrade teaching skills
- School community relationships
- Parent/teacher conferences
- Assemblies
- Articulation between grade levels, between elementary and junior high, between junior high and high school
- Orienting new teachers
- Coordinating regular teachers and substitute teachers
- Establishing schoolwide norms and rules for student behaviors
- Reducing accidents in gym
- Reducing stress
- Increasing job satisfaction
- Managing student records
- Reducing employee and student absenteeism
- Handling school closing or staff consolidation
- Improving supervisory practices
- Reducing vandalism
- Curtailing waste
- Increasing affiliation among staff
- Meeting special needs of students

School Principals

- Finding more time to conduct instructional improvement activities
- Reducing paperwork flow
- Motivating teaching staff
- Improving communication vertically between the school and central office
- Reducing stress and pressure
- Time management problems of being a principal
- Improving delegation to school secretaries and other support staff at the school level to get more done
- Handling communication with parents and other citizens at the school level
- Managing committees, task groups, and other decision-making activities of teachers and other staff
- Scheduling problems
- Managing time to include all necessary staffings for various purposes
- Maintaining a school climate appropriate for learning
- Ensuring the teaching staff continue to update their skills
- Developing and maintaining high expectations of teaching staff about student learning disabilities

Library Aides

- Books coming back damaged
- Books that are overused by teachers and students and aren't there when needed
- Patterns of student traffic in the libraries and learning centers to avoid confusion
- Discipline problems in the library
- Library organization
- Scheduling problems with various classes using the library
- Student management skills of library aides who aren't trained as teachers

Central Office Secretarial Staff

- Managing telephone calls to the district and among the schools
- Improving communication among all the schools and the central office
- Managing personnel data appropriately
- Duplication and information processing problems
- Keeping track of district capital equipment for inventory purposes
- Handling irate citizens in a positive manner
- Assisting school secretaries in handling excess work load
- Improving job satisfaction and reducing stress
- Considering more efficient technological methods for managing various forms of district data

Custodians

- Graffiti on lockers and bathroom walls
- More efficient ways to clean a building in less time
- Overload on demand to use cleaning equipment throughout the district
- Safety problems regarding cleaning and maintenance equipment
- Monitoring major heating and maintenance functions to save costs; energy saving programs
- Developing long-range plans for scheduling building maintenance
- Handling interpersonal conflicts within the custodial staff and between custodians and teachers
- Dealing with communication problems of limited-English proficient custodians in an English-speaking school.

Bus Drivers

- Student discipline on the buses
- Defensive driving techniques during winter months
- Orienting and training new drivers.

Food Service Workers

- Reducing student waste of school food
- Improving the appearance and quality of food to compete with fast food alternatives
- Interpersonal problems between food service workers and students
- Managing the time problems associated with serving lunches to a large school population
- Keeping the lunchroom clean
- Handling special food orders for medical problems, special clubs, and the like
- Maintaining and reducing costs associated with food service equipment

• Creating and maintaining a positive environment for eating.

Implementation: The Politics of Quality Circles

The politics of quality circles are no different from the politics of any innovation. Those of us who have participated in educational improvement programs in public schools during the past ten years have learned that unless innovators give careful attention to "political" factors, any innovation, no matter how well thought out, will fail to be adopted. Successful implementation, therefore, includes a systematic plan for addressing these issues.

Following is a step-by-step plan for implementing quality circles to ensure proper involvement of the appropriate power groups. While modifications in these steps can be made, the administrator wishing to implement successfully should not deviate far from the basic structure.

1. *Obtaining top administration support for the program.* A commitment to quality circles must be perceived as a long-range attempt to enroll more brain power and employee creativity in solving critical organizational problems. In private settings, it is generally accepted that it will take 18 months before the initial financial investment in the quality circle is recovered. This implies the need to invest organizational resources, primarily staff time and some financial resources, to set up, train, and supply quality circle leaders and participants.

No matter how positive your organization is, there will always be foot draggers, nay sayers, and negative thinkers. No process of essential human change can predict in advance all the intricacies and dynamics that will emerge as the process moves along. We know problems will be encountered and mistakes will be made.

For all these reasons, active commitment and support from the top administrator and the board is essential. While it is not necessary that the top administrator participate directly as a quality circle member, the idea makes good sense. For example, the Illinois State Board of Education expressed its commitment by installing quality circles in its 900-employee bureaucracy, and created a pilot circle among the superintendent's cabinet. The circle leader for this group is the state superintendent of education and circle members include the deputy and assistant superintendents for the various administrative departments.

2. *Establishing a steering committee.* The steering committee is responsible for monitoring the installation and evaluation of the quality circle program. It is composed of representatives from various organizational power groups. The steering committee:

a. Establishes policy for the initiation and operation of quality circles within the organization

b. Plans implementation

c. Selects a facilitator to supervise the implementation

d. Monitors progress of the circle program and recommends changes to keep it on target

e. Suggests ways to improve and expand the quality circle program

f. Periodically informs top management and other employees of results being achieved.

In a school environment, the steering committee should include minimally the following representatives: (1) the superintendent or the superintendent's designee who clearly represents the superintendent's authority on the steering committee; (2) a representative of the principals' organization; (3) a high level representative from the teachers' collective bargaining unit; (4) the business manager or other business-oriented official; and (5) representatives of support staff groups including custodial/maintenance personnel, school secretaries, and food service employees. Any other groups in the organization to be considered as areas for pilot circles should be represented on the steering committee. Other representatives could include community participants, board members, students, or individuals with specific technical abilities that may be useful to the success of the circle program.

While the steering committee need not devote a lot of time to meeting as a steering committee, certain key responsibilities must be handled by this group. The most important of these is the identification of a facilitator.

3. *Appointing the quality circle facilitator.* The facilitator is the key individual who is the most knowledgeable and resourceful regarding the quality circle concept. The facilitator:

1. Sets up a circle system within the organization

a. Sits as an active member of the steering committee

b. Serves as quality circle program coordinator

c. Trains members, leaders, and management as appropriate

2. Maintains circles on a regular basis

a. Coordinates different circles

b. Maintains circle records

c. Arranges meetings with outsiders to visit circles

d. Attends circle meetings

e. Searches for new members

f. Encourages idea sharing among circle members about circles

g. Publicizes the circle program to all employees

h. Is an advocate within and outside the organization for the quality circle concept

i. Does background detail work to make sure circle groups have resources needed and to make sure management presentations are handled appropriately

j. Prepares training materials and develops orientation and training program as the circle concept expands

k. Maintains records of all circle activities and gives periodic reports to the steering committee on circle results

Whether or not to hire the facilitator on a full-time basis is an important and difficult decision. It is not mandatory that the facilitator be assigned full-time to quality circle activities. On the other hand, the position should not simply be added to the job description of a central office administrator, principal, or department chairperson who already has many responsibilities. While it is difficult to estimate the amount of time needed by the facilitator to adequately manage the quality circle program, some companies have found that a full-time facilitator is required if six or more circles are established during the pilot year.

4. *The management presentation.* The management presentation provides the appropriate celebration for the completed ritual of the quality circle process. It is a powerful opportunity for accomplishing goals. Most important, it is the management presentation where the quality circle members present their recommendations and supporting data in a convincing fashion to their assigned supervisor. In a school setting, this may be a building principal, a central office administrator, or the superintendent. The individual receiving the management presentation must be open and willing to go along with the recommen-

dations of the circle. This is not to say that the circle process requires that every proposed recommendation be implemented. In industry, an average of 95 percent of circle recommendations are implemented. It is important, however, that the administrator make a decision following the management presentation and communicate it as quickly as possible to the circle members. If the decision is not to implement the circle's recommendations, clear and concise reasons should be given. The supervisor needs to interact with the circle group for as long as necessary until they understand and accept the reasons for the rejection. If the quality circle process has proceeded appropriately, all-out rejection of a recommendation is very unlikely. One of the key responsibilities of the facilitator throughout the process is to inform the individual who will ultimately make the decision of the direction being taken by the quality circle so that the management presentation does not come as a negative surprise.

5. *Evaluating the effectiveness of the quality circle program.* Establishing criteria for evaluating and monitoring the effectiveness of the program is one of the responsibilities of the steering committee. At the beginning of the pilot process, criteria on which the program will be evaluated are articulated and shared widely in the organization. These criteria often include not only actual cost savings to the organization but participant perceptions of the worth of the project and benefits to morale, job satisfaction, and work climate. Whether these measures are based on standardized devices or subjective report is less important than the fact that they are clearly established at the beginning of the process.

6. *Quality circle expansion.* The built-in training process of the quality circle program makes its eventual expansion to more groups natural and inevitable. Typically, about six months into the program the facilitator and group leaders in the pilot circles will identify a circle member in each group with the capability and willingness to become a new circle leader. These individuals can be given extra training and allowed to set up new circles as the demand for participation increases. You know the program is developing properly if there are always some individuals not participating in circles who are pressing for the opportunity.

Quality circles, like any innovation, must eventually become integrated into the ethos of the local organization. If implementation is going well, the integrity and ritual aspects of the circle, which are its power, will be maintained even as the circle process takes on the characteristics of the specific organization.

What Circles Don't Deal With

Quality circles are not an alternative management system to the system existing in an organization. They are a management tool designed to increase the leverage of the organization at solving problems efficiently. The decision to establish a quality circle program is a management decision, even though participation in quality circles must be voluntary. Since we are human, certain areas must be identified up front as off limits for circle problem solving. Any problems that relate to the collective bargaining agreement that exists between the various employee associations and the board are to be handled within the structures delineated in the agreement, not in the quality circle. Any issues that relate to the legitimate prerogatives of management, such as hiring and firing employees, assigning employees, and establishing policy are not the prerogative of the quality circle. Any issues that focus on individual personality problems or characteristics of individual employees are off limits as well. Other locally determined, sensitive issues unique to an organization may also be identified in the beginning as off limits. This need not inhibit circle development or threaten the integrity of the circle process. It is important that these areas are articulated in the beginning, and that the facilitator and group leader ensure that groups comply with these rules of conduct.

The Quality Circle Is Not a Con

I make this assertion because many administrators have implemented what I call pseudo-participation programs in which the hidden agenda was to manipulate staff into feeling involved in the decision-making/problem-solving processes of the organization when, in fact, the leader was not sincere. The sincere commitment of the top administration will be tested early in the quality circle program. For instance, a quality circle may request sensitive and closely guarded information only available to a few administrators, but which is needed for problem analysis. The willingness of the administration to share openly any and all information that is requested within legal and ethical limits is a critical test of the whole system.

Some managers fear empowering their employees. They believe that if their employees understand their power, they will lose control, look bad, or be fired. Research, however, clearly shows this is not true. In any hierarchical organization, the results achieved by employees are recorded against the account of the manager in charge. The more responsibility employees are willing to take, the more participation they have in problem solving, the more energy they devote to improving the organization, the better it will be for the manager in the eyes of those higher up. Yet, make no mistake. It is scary to give up power to employees knowing that you will be hard pressed to go against their recommendations. Few things worth doing are without their risks.

There is no way to know whether or not quality circles will work in a particular public school setting. That the concept is working in a variety of organizations is well documented. Final responsibility for examining this particular tool rests with the individual school administrator who may have a lot to gain or a lot to lose by considering quality circles.

As a final note, I'm reminded of one of the more positive contributions of the former Director of the Office of Management and Budget, Bert Lance, who said, "If it's not broke, don't fix it." So if your school's not "broke," you may see no purpose in investing the resources necessary to implement quality circles. On the other hand, if it's "broke." . . . □

Resources for Information on Quality Circles

Training Sources

Northwest Educational Cooperative
500 S. Dwyer
Arlington Heights, Ill. 60004
(312) 870-4100
Contact person: Lawrence G. Chase, Executive Director

Educational Improvement Center, N.E.
2 Babcock Place
West Orange, N.J. 07052
(201) 731-8400
Contact person: James Lewis, Executive Director

Material Resources: Training Materials

Quality Circle Institute
1425 Vista Way
Airport Industrial Park
P.O. Box Q
Red Bluff, Calif. 96080
(916) 527-6970
Contact person: Donald Dewar, President

International Association of Quality Circles
P.O. Box 30635
Midwest City, Okla. 73140
(405) 737-6450
Contact person: Robert D. Collier, Executive Director

Monographs on Implementing Quality Circles in Educational Settings
San Mateo County Office of Education
333 Main Street
Redwood City, Calif. 94063
(415) 363-5400

Quality Circle Training Materials for Educational Applications
Educational Improvement Center, N.E.
2 Babcock Place
West Orange, N.J. 07052
(201) 731-8400
Contact person: James Lewis, Executive Director

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Theory Z: How American Business Can Meet the Japanese Challenge.
New York: Avon Books, 1981.

The following materials may be ordered from the IAQC Executive Office, P.O. Box 30635, Midwest City, Okla. 73140, (405) 737-6450.

Quality Circles by Donald Dewar and Jefferson F. Beardsley. Describes training, implementation, and operation of quality circles, 1977 (186 pages).

1979 Transactions. The transcripts of papers presented at the First Annual Conference of the International Association of Quality Circles (119 pages).

1980 Transactions. The transcripts of papers presented at the Second Annual Conference of the International Association of Quality Circles (119 pages).

1981 Transactions. The transactions of workshops presented at the Third Annual Conference of the International Association of Quality Circles (191 pages).

1982 Transactions. The transcripts of workshops and presentations made at the Fourth Annual Conference of the International Association of Quality Circles (564 pages).

Introduction to Quality Circles. Audiovisual slide and cassette presentation consists of 80 slides and cassette tape.

Quality Circle Leader Manual by Donald Dewar (250 pages).

Quality Circle Member Manual by Donald Dewar (160 pages).

Basic Quality Circle Techniques. Eight audiovisual modules by Donald Dewar.

Quality Circles: Answers to 100 Frequently Asked Questions by Donald Dewar, 1979 (48 pages).

Audio-Visuals (Set of 3 Advanced Training Techniques) by Donald Dewar: (1) Histograms, (2) X R Control Charts, (3) Np Control Charts.

Hewlett-Packard Video Tape. Videotape on quality circles in action at Hewlett-Packard.

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Topic E

The Supervisor as Facilitator in the Improvement of Teaching and Learning

ALMOST ALL WRITERS AGREE THAT THE PRIMARY FOCUS IN educational supervision is—and should be—the improvement of teaching and learning. The term instructional supervision is widely used in the literature to embody all efforts to those ends. Some writers use the term instructional supervision synonymously with general supervision. Others use it to denote the primary, if not the only, area of responsibility for supervisors. Titles used for supervisory positions—such as director of instruction, assistant superintendent for instruction, and instructional supervisor—reflect the commonly held view that the improvement of teaching and learning is the major responsibility of central office supervisors.

At the individual building level, the principal is charged with the responsibility for instructional leadership. In larger elementary and middle schools, a principal may assign a "lead teacher" to be the one most directly responsible for the supervision of instruction. Department chairpersons in secondary schools often provide direct instructional support for the teachers in their departments. Some of the articles chosen for this section reflect the priority assigned to the task of instructional supervision in the schools. Other articles earned places in this topic because they report current research on effective teaching and, therefore, hold promise for contributing to efforts to improve instruction.

The article "On Teaching and Supervising: A Conversation with Madeline Hunter" was selected because Hunter is an internationally recognized authority in the area of helping teachers improve teaching and learning. In her conversation with Brandt, she gives her opinions on a wide range of issues including teaching as decision making, teaching for thinking, instructional supervision, coaching, merit pay, and career ladders. During the interview, Brandt raises questions about Hunter's teaching model: "Are there any teaching circumstances for which your model isn't appropriate? . . . If more teachers used your model would (teaching) change? . . . How do teachers learn to use your model?" Readers will find this wide-ranging interview interesting and informative.

In "Synthesis of Research on Teachers' Questioning," Gall reviews the research on the recitation method of teaching, including the research specific to teacher questions and to student responses. The author points to the contradictory findings regarding the effectiveness of fact and higher cognitive questions and concludes that the challenge for the teacher is to use each type to its best advantage. In attempting to understand how fact and higher cognitive questions affect learning, Gall reviews five steps students take (or should take) in answering a teacher's questions. The article also provides a background of information to help the reader understand the remaining five articles in this section.

In "Synthesis of Research on Explicit Teaching," Rosenshine discusses the research on effective teaching which has been conducted since 1974. He summarizes the results in six categories which he calls teaching functions: review, presentation, guided practice, corrections and feedback, independent practice, and weekly and monthly reviews. Rosenshine acknowledges that this pattern of instruction is more useful in teaching some bodies of well-defined content and performance skills than in teaching less well-structured content. He concludes, "The results have consistently shown that when teachers teach more systematically, student achievement improves—frequently with gains in students' attitudes toward themselves and schools." Practitioners may want to discuss with colleagues the claims made in the article for explicit teaching.

The authors of the next article, "The Subtleties of Instructional Mediation," claim that instruction is more than getting students on task and presenting content in an organized way. Duffy and Roehler view instruction as cognitive interaction between teacher and students in which the teacher provides a "mediational bridge between the students' current understandings and the ultimate outcome." As the teacher's role changes to that of cognitive mediator, Duffy and Roehler see a new challenge for instructional leadership—"to help teachers verbally mediate students' understandings of conceptual learnings."

In "You Ask the Wrong Questions!", Barell presents two vignettes of teaching. He relates systematic instruction and thinking, which he defines as the search for

meaning. He has "attempted to provide a partial refutation for the claim that current research on teacher effectiveness has no significant implications for thinking at higher grade levels or in more complex human situations." Practitioners will do well to take heed when Barell says, "The real danger in using teacher effectiveness research is that it may become prescriptive, a set of behaviors to be checked off by the supervising administrator."

The terms "direct instruction" and "explicit teaching" have been bandied about in discussions of effective teaching. The Rosenshine article synthesizes the research on explicit teaching. Duffy and Roehler urge teachers to engage with students in "instructional mediation." In "Direct Instruction in Reading Comprehension," Gersten and Carnine draw heavily from their own research as they identify the distinguishing characteristic of teaching they studied as "the use of *explicit, step-by-step training* in comprehension strategies." They conclude with the advantages of explicit strategies and a recognition of the criticism leveled by some educators. Practitioners will find the article helpful in defining direct instruction as applied to the teaching of reading comprehension. All readers will be interested in the evidence that the current researchers of effective instruction build upon the findings of each other.

In the final article in this section, "How Teachers Manage Individual and Small-Group Work in Active Classrooms," Kierstead describes a management strategy that allows the teacher to control students indirectly as they engage in individual and small group projects. Because of renewed interest in encouraging students to use higher-level thinking skills, it is expected that teachers will allow students to engage in "a variety of real-life activities." This approach to teaching will create the need for more effective management techniques. In multi-task settings the successful teachers, according to Kierstead, have established some basic processes including defining what students will work on and establishing work cycles for both student and teacher. If, as the author predicts, different instructional methods will be required for the teacher to direct multi-tasks, supervisors will need to give attention to how they can support teachers in classroom management.

In reading the articles in this section, the following questions may stimulate thought and action.

1. Consider Hunter's responses to Brandt's questions related to teaching and supervising. What is Hunter's definition of supervision? Who are the supervisors? What are their tasks?

2. Tape record a question and answer segment of your own teaching (or a colleague's), and analyze the cognitive level of the questions. Compare your findings regarding the percent of time spent on different levels with the percentages reported by Gall. What are the implications of your findings for (1) the teacher and (2) the teacher's instructional supervisor?

2. Compare the specification by Rosenshine of six teaching functions with related efforts by one or more of the following: Gersten and Carnine and their components of direct instruction; Hunter and her seven elements of lesson design; and Good and Grouws and their key instructional behaviors. How are they alike? How are they different?

4. Observe a teacher and students for evidence of the mediation process described by Duffy and Roehler. Record specific evidence of the teacher's attempts to mediate students' understandings verbally. Record also specific examples of students' attempts to mediate the teacher's initial instructional information. What are the implications of your findings for instructional supervision?

5. In your judgment, what is the major implication of "You Ask the Wrong Questions!" for the supervisor's thinking about instructional improvement?

6. Write a capsule report appropriate for a newsletter to teachers based on the Gersten and Carnine article.

7. Based on the Kierstead article discuss with two of your teacher colleagues (1) the advantages of the management system she advocates and (2) the steps a teacher might take to implement the system. Report the opinions of the teachers on these two items of discussion.

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On Teaching and Supervising: A Conversation with Madeline Hunter

RON BRANDT

Madeline, you have probably had more influence on U.S. teachers in the last ten years than any other person. What accounts for that?

Well, teachers have had a lot of intuitive knowledge, but it's never been based on theory. What I have tried to do is take what research tells us about teaching and translate it into something teachers can use tomorrow morning as they make educational decisions.

Briefly, what do you teach teachers?

That teaching is a constant stream of decisions and that good decisions increase the probability of learning. We now know cause-effect relationships between teaching and learning. Teachers can't control everything, but they can certainly influence it. It's true that you can lead a horse to water but you can't make him drink. You can, however, salt his oats. You can run him hard. You can keep him away from water. So we're looking at every way a teacher can influence a student's motivation to learn, the rate and degree of that student's learning, the retention of what's been learned, and the appropriate transfer of that learning into new situations.

Madeline Hunter

One would think that most teachers would know these things already. Why don't they?

One reason is that they're taught in a way that doesn't transfer. For example, there isn't a teacher in the world who hasn't studied about Pavlov. And yet when a teacher asked me to work with a child who was always making smart remarks, I found that the minute the kid made a remark, the teacher said, "Now what did you mean by that comment?" When I asked the teacher what the boy wanted with his smart remark, she said, "Attention." I asked, "What did you give him?" When she looked surprised, I said, "Have you ever heard of Pavlov?" She said, "What does a slobbering dog have to do with it?" Well, there was no transfer. In his memory lab, Wundt showed more than 50 years ago that the beginning and end of any sequence are the easiest to learn. And yet teachers use the prime time at the beginning of a class period to take roll, to make assanine announcements, to collect lunch money—because they have to get the job done. We now know how to have them get some learning done along with the job. The knowledge has been around for years, but it was in terms of pigeons and rats, or in terms of the psychological laboratory, so the teacher saw no similarity between it and the classroom.

Well, you've certainly translated it into practice, but why don't others do the same?

I think it's very difficult for researchers in the university to know how their research can be applied in practice. When my husband was trying to produce a plane that would protect the pilot from radiation, he worked with one of the leading radiation theorists at Cal. Tech. My husband would come home pulling his hair out and saying, "That guy is trying to design a Sherman tank for me to put on the nose of an airplane." I said, "Has he ever seen a fighter jet?" My husband said, "I

Ron Brandt is Executive Editor, Association for Supervision and Curriculum Development, Alexandria, Virginia.

don't know. Maybe not." So he took the scientist the next day, put him in a fighter jet, and said, "Now, here's the guy you have to protect—and he has to see where he's going." "Oh," said the fellow.

You can't expect researchers to translate the knowledge they produce because they don't know what the plane looks like—and most of them aren't really interested in that. I'm very fortunate to have been thoroughly steeped in psychology but also in having spent most of my life in the trenches of public schools. So I'm kind of bilingual in theory and practice.

Isn't the research you draw upon quite behavioral in its orientation?

Anybody who says it's behavioral does not understand our model. It's been called behaviorial simply because we include attention to reinforcement. If a student is able to generate an elegant hypothesis, we let him know he's valued and he's competent. People look at that, and say, "It's all reinforcement." Well, it's not. For example, we do a lot of work on teaching for transfer, which has nothing to do with reinforcement theory. The one idea we push the most is having students attach meaning to what they're learning, which comes from Merle Wittrock's generative theory of cognition.

There's a lot of interest these days in teaching for thinking. How does that fit in your model?

It fits very well because our model maintains that if students can't take the learning they have and translate it to a new situation, it's worthless. If all you're going to teach are names and dates and facts, you're wasting your time and the students' time. Learning is like money in the bank; it's great to have it there but it's only useful when you pull it out and use it.

So it's very important to teach for higher-order thinking, but not without building a foundation. I see teachers asking children to compare the governments of Russia and the U.S. when the students don't know anything about either of them.

How do you feel about the ideas of people like Reuven Feuerstein and Robert Sternberg, who believe that the key is to teach the necessary intellectual skills directly?

I agree with them. We factor-analyze what a student needs to do, just as we would factor-analyze what a painter needs to do to paint a house well. That doesn't mean that thinking isn't a lot more complex than painting, but there are similarities: you have to prepare it, you have to sand it, and so on. I'm worried, though, that we may begin teaching these skills in isolation the way we now teach some other skills. We will have a period of thinking skills and then have social studies, with no transfer. In a lot of schools, kids spit and sputter their way through phonic skills and then when they come to a reading task, they don't use the skill.

Whenever you isolate a process and teach the process separately, there's a danger that students will not actually use it. We have to help them make the application. For example, if we teach children about decision making, we need to translate it: "How are we going to decide who's going to be captain? How are we going to decide what kind of cooking to have at the party? How do you decide whether to do your work in your free time or take it home for homework?" Decision making must become a part of the student's real life.

"This model should provide the launching pad from which creativity can soar."

Are there any teaching circumstances for which your model isn't appropriate?

Not at all. I'm always amused when somebody says, "Well, that's fine for drill, but not good for creative learning, or It's all right for large groups, but not for small groups."

I literally teach all over the world. Most recently I was teaching a group of children in China. They happened to speak English; otherwise I couldn't have done it. The Chinese wanted to see me work with a nongraded group, because they couldn't feature children of different ages learning together. I took a group of five- through 14-year olds who had just visited a commune, and I had them categorize what they had seen.

One of the five-year-olds—we would label him a hyperkinetic student—responded to exactly the same techniques that work with children here in the U.S. For example, we categorized first by what humans had made—baby buggies and so on—versus what nature had made, like the rice and the rape seeds. Then we categorized by "Which place would you like to work?" That five-year-old could shift categories like crazy, while one of the "brightest" kids in the school, who could memorize and regurgitate perfectly, found it almost impossible to shift categories. But exactly the same techniques worked with Chinese children as had worked about two weeks before with children in Milan, Italy, and had worked about three weeks before with children in Hong Kong.

There really is an invariance to human learning, as there is invariance to human anatomy and physiology. There are differences, but they're not nearly as great as the similarities.

From your travels to other nations, what can you say about how U.S. education compares with education in other countries?

All countries have fabulous schools and poor schools, just as we have. I do not see all the greatness that is reported in Japan and Russia. I've been in Japanese schools and I've been in Russian schools, and we can learn from them—but if they're so excellent, why are they sending for me? Right now, if I had to pick a country for my own child's education, and I couldn't pick the school, I would choose the U.S.

You're aware, I know, of the findings by John Goodlad and his colleagues[1] that most teachers use a very small number of strategies—mostly talking to their classes or having them do worksheets. If more teachers used your model, would that change?

Very definitely. However, let's not forget that John Goodlad talks a lot to his classes—but he talks very well, so his students learn a lot.

One of our problems is that teachers have been told to have discussion groups but they don't know how. They have been told to have more individual projects. But generalizations like that are not enough; teachers have to learn how to do these things. For example, we have task-analyzed independent learning, identifying step-by-step how you move children from being dependent to becoming more independent. Then we made a series of films starting on day one and moving through the stages until by the middle of the year the students were conducting their own reading groups. But that's a sequence of learning skills, not admonition.

How do teachers learn to use your model?

They go through three stages. First they learn the propositions, such as that the beginning and end of any sequence are the most powerful times for learning. Even though they learned that in ed. psych, they don't understand how it applies to wasting time by taking attendance, collecting lunch money, or cleaning up. Now those things have to be done, but we teach teachers how to use the time productively: "While you're putting away your equipment, be ready to give me a summary statement of what you've learned from this experiment," or "While you're putting your books back in your desk, be ready to say what you think is the single most important facet of Columbus' personality."

When we have taught a proposition like "The beginning and end of a series is your prime time," then we translate it into procedures: how do you do it? First I simulate it while I just talk about it, then we role play an actual teaching episode. By the way, it has to be unfamiliar content. You can't teach people something they already know; that would be violating a basic principle.

Then they have to try it out with students in their own classrooms—with coaching, so somebody helps them see what they're doing well, and where the booby-traps are and how to get out of them. It's a three-stage process of knowledge, procedure, and then conditional decision making.

What do you mean by coaching?

We teach that when you're watching a teacher make what is called a "script tape." It's really a sort of shorthand log of the teacher-pupil interaction. You

"My purpose is to tell teachers what to *consider* before deciding what to *do* and, as a result, to base their decisions on sound theory rather than on folklore and fantasy."

"The model is equally effective in elementary, secondary, and university teaching. In fact, it applies to every human interaction that is conducted for the purpose of learning."

This Conversation with Madeline Hunter on Audiotape

The complete recorded interview from which this edited version is taken is available from ASCD. Ask for "On Teaching and Supervising: A Conversation with Madeline Hunter." Stock No. 612-20432. $9.00. Orders under $20 must be accompanied by payment. Write to Audiotape Fulfillment, ASCD, 225 N. Washington St., Alexandria, VA 22314.

capture what the teacher does just as you would on videotape or audiotape, but you do it in writing. It's a kind of recording that you can play back to the teacher so the teacher knows in temporal order everything that happened in that lesson. That script tape is the basis for your diagnosis of the teaching—just as you'd look at a child's math paper and say, "He knows this and he's ready to learn that." We give the teacher feedback as to what the teacher did really well and why it worked, and we find in many cases that we bring intuitive knowledge to a conscious level.

As I said in your ASCD yearbook,[2] intuition is sterile. Some people thought I meant it was useless, but I meant it could not be reborn in somebody else. A sterile animal—a donkey, for example—may be a very useful animal, but it can't recreate itself. Teachers who happen to create a good learning activity solely by intuition cannot recreate that in a new situation as predictably as they could if they had conscious knowledge, such as that the beginning of a sequence is the most powerful. So we move from intuitive knowledge to articulated and deliberate knowledge. Now, as I said in the article, there's quite enough room for using intuition beyond what we know consciously.

So when we give a teacher coaching and feedback, we identify those things the teacher did well in terms of teacher-student behavior. An example might be, "Madeline, when you went over and stood by the boy who was fooling with the rubber band and he put it away, do you know what caused that? Researchers have found that the closer you are to the authority figure, the more likely you are to behave as expected. So you probably caused the boy to put away his rubber band, and with no loss of dignity."

Then, if there were things the teacher did that caused difficulty, we bring them to the teacher's attention: "You know why the student gave you the wrong answer for that? You had just asked a different question and he was thinking about that. Then you changed the question, but he didn't change with you." The teacher will say, "Oh, is that the reason?"

It sounds like what you're calling coaching is not much different from what some people call supervision.

To me, coaching and supervision are the same. To me, a coach is a person who has the skills to enable another person to perform better. That's very different from practice. Often people recommend that teachers watch each other and give feedback. Now, that's fine if every teacher is very knowledgeable, but coaching takes special knowledge. For example, a football coach will show a player how to throw the ball, how to shift his weight. He might say, "You're not getting enough of your shoulder in that throw; there's too much of your arm and not enough of your shoulder." Then he'll say to that player, "You and Bill go out and practice that." A lot of what people are calling coaching is really practicing: just working together.

Many principals are afraid to coach teachers because they think that to help a teacher they ought to be able to teach better than the teacher. They really don't have to. In fact, it's possible to coach a person in teaching when you don't even know the content. In China, I helped the teachers improve their teaching of Chinese even though I don't know Chinese. I worked with the teachers of German and with our geophysicists at UCLA, and even though I didn't know the

content, I could help them teach it better.

Some people contend that a person in a position of authority over a teacher can't really function as a coach. Do you find that true?

No, I think that's a ridiculous notion. I have never found that people resent being evaluated by an authority figure who knows what he or she is doing.

You said earlier that I have influenced teachers. I would like to think I have influenced principals even more, because we know the power of the principal to make a school either more excellent or more mediocre. In fact, I'm encouraging school districts to make principals their first priority.

There seems to be a trend in many school systems to make the principal the primary instructional leader, although in some places there are supervisors outside the school who are considered to have more expertise in instruction than the principal.

Excellence in teaching stands on two feet. One is curriculum, and the other is pedagogy or skills of teaching. You cannot be an expert in every phase of curriculum. We need someone who knows enough about social studies, for instance, to help me know the key concepts that ought to be taught about the Revolutionary War. We need someone who knows what verb form ought to be introduced first, and so on. So we need central office curriculum consultants. But no outside supervisor can be in the school often enough to really help a teacher on a day-to-day coaching basis. The only person who can do that is the principal or the building-level resource teacher. I am all for having resource teachers as an aid to the principal, because the principal does have other responsibilities—but not in place of the principal. The person who does the evaluation ought to have watched the growth pattern of that teacher throughout the year.

Some people say that principals in large schools simply don't have the time to be supervisors.

I disagree with that. I have been a principal most of my life, including assignments in the ghettos and in the richest and most demanding areas of Los Angeles, and I have never ever had a principalship where I didn't have some time to work with teachers on increasing effectiveness. If you do that, all the other problems go down. Your discipline problems go down, your parent problems go down, your lunch room problems go down, your bus problems go down. The only thing you can't reduce with excellent supervision is the amount of paper coming from the central office. That goes on and on.

Of course, no principal has the time to do all the supervision he or she would like. I would be happy to spend 100 percent of my time in classrooms, but you can't do that when you're running a school. It's a question of both quantity and quality. I know many a principal who says, "I make it a point to walk in and out of every classroom every day." And that principal does nothing but walk in and out of every classroom. I know other principals who may take 15 minutes to visit three classrooms and each of those teachers later gets useful feedback.

If it's not being a threat or lack of time that prevents principals from being good supervisors, what is it?

They don't know how. They certainly didn't learn it in graduate school. Our training programs in teaching and administration are way behind what we know. It's only recently at UCLA that we've added instructional analysis to our supervision course even though we've been doing it in our lab school for 20 years.

There are some who feel that we're not going to have superior teaching until we change the circumstances under which teachers work: the number of students they have to work with, the countless responsibilities they have. Do you agree that it's almost impossible for a teacher to do an effective job under the circumstances most teachers face?

No, I don't. I think it's possible to do a very effective job under the circumstances, but I don't think it's fair to ask teachers to do it. I've seen teachers do a fantastic job under horrendous circumstances, but it has taken too much toll on them.

I have two children, one in education and one in the film business. They're both fine people, both excellent in their field, they both work hard, and yet one's income—the one in the entertainment business, of course—is far higher than the other. I think it's critically important that we pay teachers a salary more like those of other professionals.

On the other hand, I don't think that just being a teacher should automatically entitle a person to a good salary, any more than just being a doctor or an attorney does. They have to perform well. I have very strong feelings that merit pay is desirable provided you're paying for skill in doing a more difficult job. If there were two teachers, each with 30 of the same kind of children, I would find it unfair to pay them different salaries simply because one was considered to be doing a better job than the other. Excellent surgeons or excellent attorneys make

a lot more money, but they work on more difficult cases.

Many educators say that any form of merit pay is impractical because it is so difficult to determine which teachers are best.

But it's very easy to know which students are more difficult to teach. We pay extra for teachers with special credentials to teach the blind—and we don't give them nearly as many students. We're saying the job is more difficult. Surgeons who do heart transplants don't do surgery as often as surgeons who remove appendixes—and they earn more money.

Of course, all parents want a superior teacher for their children whether their child has a special problem or not.

Every child should have a well qualified teacher. I think we have the knowledge to say, "This teacher is a fine teacher; this one leaves something to be desired; this teacher is outstanding." Now it would be nice if all teachers were outstanding, just as it would be nice if all surgeons were outstanding, but if you're to have a sliver taken out of your finger, you won't be nearly as concerned as if you're going to have a cancer removed—because it doesn't take the same kind of skill.

I'm for merit pay. I know we're going to have some terrible errors committed in deciding which teachers should be paid more. On the other hand, I can't think of a more terrible error than to pay a teacher who is doing nothing exactly the same amount of money as a teacher who is teaching his or her heart out.

So much of this is dependent on school principals, as we said. Can you envision a system that would assure standards of professional excellence?

Very much so. For example, in California we now have Senate Law 813, which mandates that every principal must be certified in clinical supervision by 1985. Now, one of the many problems with that law is that it doesn't state what certification means. A group of us have recommended that to be certified a supervisor would view a videotape of a teacher teaching. After a half hour spent reviewing the script tape he or she had made, the supervisor would confer with the teacher on the lesson. That kind of test would clearly show whether the supervisor was competent to analyze instruction and to confer with the teacher in an enabling rather than in a threatening or disabling way.

Do you think that procedure actually will be used?

We're hoping for it. It's already being used in several school districts.

How do you feel about the idea of a career ladder for teachers, with various levels such as master teacher?

I strongly endorse it. For example, I think a brand new teacher coming into the profession ought to have the coaching and guidance of a master teacher. At UCLA we have seen the difference between putting our student teachers with a master teacher—such as one of our laboratory school teachers—versus putting them with John Doe, who may or may not be expert. In fact we spent a lot of time training our supervising teachers and we turned out student teachers second to none in the world. Now, you can't make a fine teacher in one year, so I strongly urge that beginning teachers have a period of internship—and you don't drop them after that. Even the very finest teachers can still learn. The greatest reinforcer in the world for me is when a teacher comes up and says, "You know, since I've learned this, I'm as excited about teaching as I was at the beginning."

Speaking of growing, you made a career change of your own recently.

I had been trying for ten years to talk myself into leaving the UCLA Lab School, but it is such a fantastic place, it was hard to leave. Before being at the Lab School, the longest I was ever in one assignment was three years, and that only happened once—when I built a training and demonstration school in the inner city of Los Angeles, and I asked to stay a year and just enjoy it. I had always been a "hopper around." So after 20 years at the Lab School I thought, "you know, Madeline, you can run this school with one hand tied behind you. Practice what you preach." I had a lot of ideas I wanted to try out, I had some writing I wanted to do, and I had been traveling more and more. So I decided that I would just be a professor at UCLA. As a result of that we're making some changes. We're developing a new doctoral program focusing on the analysis of instruction, staff development, and so on.

At this stage in a highly successful and influential career, what about your work is most satisfying to you?

The ability to see that you can make a difference in a student's learning. Just as a doctor has the ability to eliminate a lot of suffering and despair, a teacher can feel fulfilled by seeing students learn and by convincing them that they *can* learn. And I help teachers learn to do that, which is very satisfying to me.

What is most distressing?

The fact that there are only 24 hours in a day. I happen to need a lot of sleep. In my next incarnation I'm going to need only three hours of sleep a night. I just cannot find time for all the things I enjoy doing.

You seem very excited about the future for education.

I think we're in a renaissance. We have the same opportunity we had 25 years ago when Sputnik went up. The only difference is that then we didn't know what we were doing. Now we do—not everything, but a powerful lot!□

[1]John Goodlad, What Some Schools and Classrooms Teach," *Educational Leadership* 40 (April 1982): 8–19.

[2]Madeline Hunter, "Knowing, Teaching, and Supervising," in *Using What We Know About Teaching* (1984 Yearbook), ed. Philip L. Hosford (Alexandria, Va.: Association for Supervision and Curriculum Development), pp. 169–192.

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Synthesis of Research on Teachers' Questioning

MEREDITH GALL

The hundreds of questions the typical American teacher asks on a typical day reflect the great popularity of the recitation method. A recitation is basically a series of teacher questions (usually about textbook content), each eliciting a student response and sometimes a teacher reaction to that response.

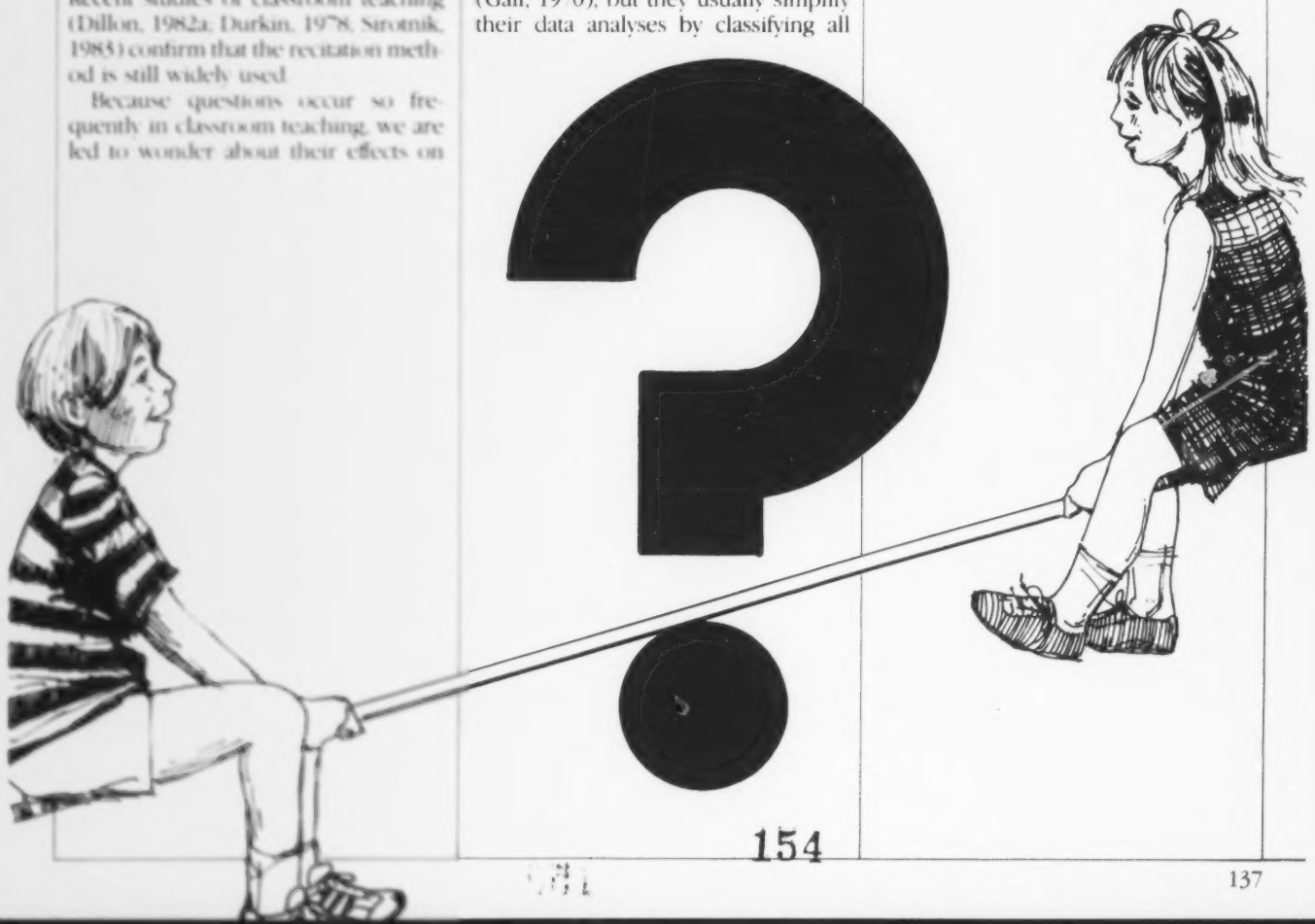
The prevalence of teaching by recitation has been found in previous reviews of research on teachers' questions, which include studies going back to the turn of the century (Gall, 1970; Hoetker and Ahlbrand, 1969). Recent studies of classroom teaching (Dillon, 1982a; Durkin, 1978; Sirotnik, 1983) confirm that the recitation method is still widely used.

Because questions occur so frequently in classroom teaching, we are led to wonder about their effects on students. Do teachers' questions help students learn the curriculum? Do they promote the development of thinking skills? Are some questioning practices more effective than others? Research prior to 1970 provided few answers to these important questions; since then, however, many relevant investigations have been carried out.

Effects of Fact and Higher Cognitive Questions

Researchers have developed many systems for classifying teacher questions (Gall, 1970), but they usually simplify their data analyses by classifying all teacher questions into just two categories: fact and higher cognitive. Fact questions require students to recall previously presented information, whereas higher cognitive questions require students to engage in independent thinking.

Meredith D. Gall is Professor, Division of Teacher Education, College of Education, University of Oregon, Eugene.



Do students learn more when teachers emphasize fact questions or when they emphasize higher cognitive questions? When Dunkin and Biddle (1974) and Rosenshine (1971) reviewed early studies on this problem (most of them from the 1960s), they could find no clear trends in the research results. Heath and Nielsen (1974) strongly criticized these studies for their methodological flaws.

Rosenshine (1976) subsequently reviewed a set of three large correlational studies completed in the early 1970s. He interpreted their results as indicating that students learn best when teacher questions "tend to be narrow, pupils are expected to know rather than guess [the] answer, and the teacher immediately reinforces an answer as right or wrong" (p. 365). "Narrow" was Rosenshine's term for a fact question.

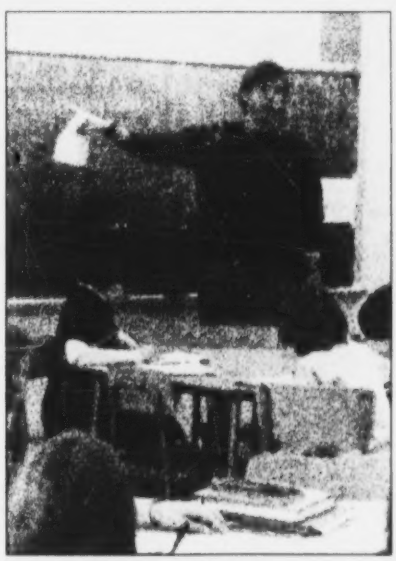
In addition to the correlational studies reviewed by Rosenshine, experiments have been conducted on the effects of emphasizing fact or higher cognitive questions in recitations. These experiments were reviewed by Winne (1979), who concluded that "whether teachers use predominantly higher cognitive questions or predominantly fact questions makes little difference in student achievement" (p. 43).

The same set of 18 experiments reviewed by Winne, plus two additional experiments, were subsequently reviewed by Redfield and Rousseau (1981). Instead of using Winne's "voting method" to pool results across experiments, they turned to the more sophisticated method of meta-analysis. Redfield and Rousseau concluded that "predominant use of higher level questions during instruction has a positive effect on student achievement" (p. 241). They did not define "predominant use," but it probably meant a recitation in which at least 75 percent of the questions are at the higher cognitive level. Student achievement in the experiments was measured by tests requiring fact recall and demonstration of thinking skills.

Thus, the Rosenshine review and the Redfield and Rousseau review reached firm but contradictory conclusions about the effectiveness of fact and higher cognitive questions. The contradiction, can be resolved, I think, by analyzing the student populations represented in the two reviews. Each study reviewed by Rosenshine involved disadvantaged primary grade children. The studies reviewed by Redfield and Rousseau involved students representing a much wider range of ability and grade levels. Taking this difference into account, I would conclude that (1) emphasis on fact questions is more effective for promoting young disadvantaged children's achievement, which primarily involves mastery of basic skills; and (2) emphasis on higher cognitive questions is more effective for students of average and high ability, especially as they enter high school, where more independent thinking is required. While *emphasizing* fact questions, teachers of young disadvantaged children should take care to include some higher cognitive questions to stimulate development of their thinking skills.

Additional evidence favoring higher cognitive questions is found in research on the effects of having students answer questions that are inserted every few paragraphs in a textbook passage. Andre (1979) reviewed this research and concluded that higher cognitive questions generally facilitate better textbook learning than do fact questions.

Teachers' questions that require students to think independently and those that require recall of information are both useful but serve different purposes. The challenge for teachers is to use each type to its best advantage.



Despite the demonstrated effectiveness of higher cognitive questions, most teachers do not emphasize them in practice. In an earlier research review, I concluded: "About 60 percent of teachers' questions require students to recall facts; about 20 percent require students to think; and the remaining 20 percent are procedural" (Gall, 1970, p. 713). This conclusion continues to be supported by recent observational studies of classroom teaching (Hare and Pulliam, 1980). It appears that teachers emphasize fact questions, whereas research indicates that an emphasis on higher cognitive questions would be more effective.

The Process of Answering Teacher Questions

The research reviewed above does not explain the process by which fact and higher cognitive questions affect learning. Recent efforts to conceptualize and study this process (Gall, 1983) have shed new light on why questions of a certain type may facilitate learning in some students, but not in others.

The typical teacher question occurs in a recitation after students have been exposed to new curriculum content, usually by reading the textbook. Answering such a question appears to involve five steps.

1. *Attend to the Question*. The first step is to listen to the question as it is asked. Students who are off-task when the question is asked will be unable to generate a response or to profit from listening to another student's response. The need for attending may explain why research on young, slow-learning students has found that it is effective for teachers to ask narrow, easily answered questions *and* to use instructional behaviors that engage students' attention (Rosenshine, 1976).

2. *Decipher the Meaning of the Question*. If the student has attended to the teacher's question, the next step is to decipher its syntax to determine what is being asked. Gullo (1983) found that young children often cannot figure out what the question asks them to do. For example, when the word *what* appeared as the object term of a question, 85 percent of the children in his research sample could answer it correctly. When *what* appeared as the subject term, however, only 21 percent of the children could answer it correctly.

"Recitations generally have a greater positive effect on students' intentional learning than on their incidental learning."

The ways teachers phrase questions can create difficulties for older students, too. Because teachers often generate questions spontaneously, some questions are likely to be poorly phrased. In everyday discourse, we can handle the problem by asking for clarification. In classroom situations, however, students may feel awkward about making such a request because it may be seen as criticism of the teacher.

3. *Generate a Covert Response*. Students need to think of an answer before they can put it into words. To generate the covert response, students must have relevant information stored in memory or available in curriculum materials; and they must possess appropriate cognitive abilities for manipulating this information.

An indirect measure of students' ability to generate a covert response is the degree of congruence between the cognitive level of the teacher's question and the cognitive level of the student's response. Several studies (Dillon, 1982a; Mills and others, 1980; Willson, 1973) found that only about half of students' responses were at the same cognitive level as the teachers' questions. Of the incongruent responses, Dillon and Willson found that from one-third to one-half were at a lower cognitive level than the teacher's question.

These results run counter to the popular belief, "Ask a higher-level

question, get a higher-level answer" (Lamb, 1976). Instead, a higher cognitive question poses a cognitive challenge that the student may or may not be able to meet. Training teachers in questioning techniques has been shown to reduce the incidence of question-answer cognitive incongruity (Klinzing-Eurich and Klinzing, 1982), but the process by which the reduction occurs is unclear.

Cognitive level is just one aspect of the student's response to a question. Gall (1970) and Ryan (1972) identified additional aspects, including whether each assertion contained in the response is clear, plausible, original, supported, and conditional.

The complexity of these response characteristics suggests that teachers should give students sufficient time to think before expecting a verbal response. Rowe (1974) found, however, that most teachers wait only one second for a response before repeating the question, calling on another student, or making a comment. Recent studies (Swift and Gooding, 1983; Tobin and Capie, 1982) found that extending wait time for several seconds has beneficial effects, including improved student engagement and longer verbal responses. In related research, Dillon (1981a) found that length of student responses increased when teachers asked fewer questions per minute.

These research findings argue against the common practice of rapid-fire questioning, which gives students little time to generate a substantial covert response followed by a substantial overt response.

4. *Generate an Overt Response.* Generating a covert response to the teacher's question does not ensure that the student will generate an overt response. A student may compete for "air time" with other students but not be called on to respond. Also, some students maintain a low profile so the teacher won't call on them.

"About 60 percent of teachers' questions require students to recall facts; about 20 percent require students to think; and the remaining 20 percent are procedural."

Researchers have investigated whether there is systematic bias in who gives overt responses to teacher questions. Jackson and Cosca (1974) found that teachers of ethnically mixed classes were more likely to address questions to white students than to Mexican-American students. Also, white students responded more often to teacher questions; and more frequently initiated remarks of their own.

Lockheed and Hall (1975) concluded from their review of research that boys are more likely than girls to speak in class discussions. However, recent studies (Dillon, 1982b; Good, Cooper, and Blakey, 1980) have found slight or no differences in boys' and girls' opportunities to respond in class.

The consequences of teacher bias in giving students the opportunity to respond are not well understood. Covert responses evoked by the teacher's questions, or listening to another student's overt response, may be most critical for learning. If so, the student who listens carefully during the recitation or who answers each question covertly would learn as much information as students who give oral responses. On the other hand, the student's own thoughts may not be fully clarified and developed until put into words.

5. *Revise the Response.* The student may rethink a covert or overt response to the teacher's question depending on what happens next. If the teacher redirects the same question to someone else, some students will revise their response in light of their classmate's contributions. Another option for the teacher is to ask one student probing questions that lead to improving the original response.

Wright and Nuthall (1970) found that teacher redirection of questions was positively correlated with student learning gains, but subsequent experimental research by Hughes (1971) failed to replicate this effect. In other research Riley (1981) found a positive effect for teacher redirection, but my colleagues and I found no effect for teacher redirection used in conjunction with probing questions (Gall and others, 1978).

The reason for these inconsistent findings may lie in how teacher redirection and probing were conducted in each study. That is, these instructional behaviors may have no effect unless they are explicitly focused on improving particular response criteria

(for example, clarity, plausibility, and accuracy).

Redirection and probing do not exhaust the possibilities for teacher response following the student's answer. Duffy (1983) suggested that teachers can facilitate learning by providing explanations that clarify and correct the student's response. Another option is to acknowledge the student's response by accepting and building on it. Researchers have conducted many studies of this technique as it was conceptualized by Flanders (1970). Gage (1978) concluded from his review of this research that teacher acceptance of student ideas is positively correlated with student learning gains.

The Effectiveness of Recitations

Most research on teacher questions over the past two decades has investigated the effectiveness of recitations in which questions vary in cognitive level. A more basic issue, however, is whether recitations, irrespective of cognitive level, are effective. Would students learn as much if teachers did not use the recitation method to help them review a section of the textbook that they have just read?

Few researchers have addressed this question directly. One relevant study (Gall and others, 1978) compared the learning of students who participated in a series of recitations with the learning of other students. Both groups had read the same textbook passages beforehand. The researchers found that students who participated in the recitations performed better than the no-recitation group on various measures of fact and higher cognitive learning.

Research on questions inserted in the text has yielded similar results. Faw and Waller (1976) and Andre (1979) reviewed research on the effectiveness of having the students read textbook passages with and without inserted questions. They concluded that students generally learn more when the passages contain inserted questions.

Questions apparently are *more* effective than no questions, but they are not necessarily the *most* effective instructional alternative. Dillon (1978) strongly criticized the effectiveness of teacher questions and proposed several nonquestioning alternatives such as "declaration of perplexity" and "deliberate silence" (1981b). The effectiveness of these techniques relative to traditional recitation, however, has not been tested.

Why is recitation effective? Analysis of the recitation process suggests four reasons.

Practice and Feedback Effect. Students usually participate in a recitation immediately or soon after reading textbook content. The recitation gives students an opportunity to practice recalling the content and thinking about it. They also receive feedback about the accuracy and quality of their answers. Thus, recitation incorporates two processes, practice and feedback, which are of proven effectiveness in strengthening knowledge and skills.

Cueing Effect. Recitation questions provide cues that may focus students' attention on particular information in the text. Evidence for this function of questions comes from research on intentional and incidental learning. Intentional learning involves the learning of textbook content that is rehearsed by recitation questions, whereas incidental learning involves the learning of textbook content that is not rehearsed.

Recitations generally have a greater positive effect on students' intentional learning than on their incidental learning (Gall and others, 1978). In other words, students perform better on end-of-unit test items that have been asked previously as recitation questions than they do on test questions they have not heard before. This suggests that when students hear a question during recitation, they are likely to rehearse the answer carefully. Students do this because they develop an expectation, based on experience, that the same question will be included on a subsequent test. Conversely, they devote low study effort, or none at all, to textbook content not covered in the recitation.

"Improving the quality of teachers' questions is not sufficient. Students also need to learn the response requirements of different types of questions."

The hypothesized cueing effect of questions may explain a perplexing effect obtained in two experiments (Gall and others, 1978; Riley, 1981). In both experiments, students who participated in recitations containing 50 percent higher cognitive questions learned less well than did students whose recitations contained either a much lower or much higher percentage of higher cognitive questions. Since the 50 percent recitations did not emphasize *either* fact or higher cognitive questions, students may have become confused about the recitations' objective—was it to rehearse facts or to think about them? In contrast, students whose recitations emphasized one type of question or the other rehearsed the textbook content without the distraction of having to second-guess the teacher's intent.

Instruction and Test Similarity. The question-and-answer format of recitation parallels closely the conventional test format for determining the amount of student learning at the end of a curriculum unit. This format consists of written test questions requiring a multiple-choice or short-answer response. Thus, the student performance elicited by recitation transfers directly to the performance required on most school tests. The practice provided by recitation certainly appears more relevant to subsequent testing than the practice provided by such instructional methods as lecture and inquiry teaching.

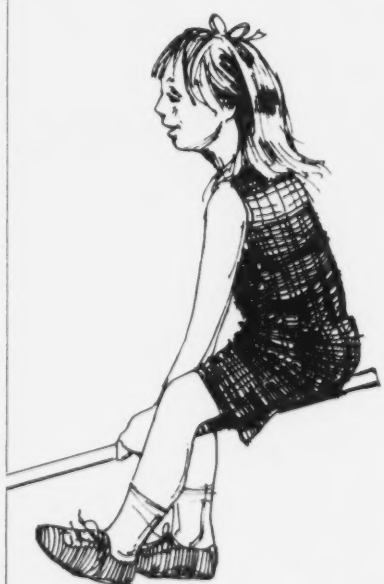
Modality Effect. Researchers have found that elementary school students are more engaged during teacher-led activities than during seatwork activities (Rosenshine, 1980). And they are most engaged when teacher-led activities involve recitations with an academic focus.

One explanation for these findings is that recitations involve speaking and listening, whereas seatwork involves reading and writing. For many students, speaking and listening may be more motivating and less demanding than reading and writing. This explanation is speculative but sufficiently compelling to warrant further research on the effectiveness of recitation and how it can complement instructional methods that emphasize other communication modalities.

Implications of Research for Practice

The research on teacher questions challenges typical classroom practice in several respects. For example, researchers have found that emphasis on higher cognitive questions generally produces better learning than emphasis on fact questions. There is no lack of books and pamphlets encouraging teachers to ask more higher cognitive questions, but apparently their admo-

". . . teacher acceptance of student ideas is positively correlated with student learning gains."



"In classroom situations . . . students may feel awkward about [asking for clarification of a question] because it might be seen as criticism of the teacher."

nitions have had little influence on classroom instruction. Educators need to search for more effective ways to influence teachers' instructional behavior.

Another challenge for practice comes from research on the question-answering process. The findings demonstrate clearly that teacher questions do not necessarily elicit good student answers. Improving the quality of teachers' questions, then, is not sufficient. Students also need to learn the response requirements of different types of questions. Recent work on this problem has yielded promising results. For example, Raphael and McKinney (1983) found that elementary school students were able to learn several question-answer relationships and use this knowledge to improve their reading comprehension.

Finally, educators need to come to grips with the question posed by Hoetker and Ahlbrand: "If the recitation is a poor pedagogical method, as most teacher educators have long believed, why have they not been able to deter teachers from using it?" (1969, p. 163). Part of the answer may be in the research findings reviewed here: teachers use recitation because it *is* effective in helping students learn the curriculum, which is largely textbook-based. Since there are few signs that this curriculum approach is changing, teachers will continue to use this method. Rather than trying to deter teachers from using recitation, therefore, teacher educators may be better advised to help them learn use it well.□

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BARAK V. ROSENSHINE

Synthesis of Research on Explicit Teaching

A decade of research on teaching has firmly established the effectiveness of systematic, step-by-step instruction.

The research on effective teaching conducted since 1974 has yielded a pattern of instruction that is particularly useful for teaching a body of content or well-defined skills. This pattern is a systematic method for presenting material in small steps, pausing to check for student understand-ing, and eliciting active and successful participation from all students.

Although this method was derived primarily from reading and mathematics research conducted in elementary and junior high schools, the results are applicable to any "well-structured" (Simon 1973) discipline where the objective is to teach performance skills or mastery of a body of knowledge. Specifically, these results are most applicable to the teaching of mathematical procedures and computations, reading decoding, explicit reading procedures such as distinguishing fact from opinion, science facts and concepts, social studies facts and concepts, map skills, grammatical concepts and rules, and foreign language vocabulary and grammar.

These findings are less relevant for teaching in areas that are less well-structured, that is, where the skills do not follow explicit steps or the concepts are fuzzier and entangled. Thus, the results of this research are less relevant for teaching composition, writing of term papers, reading comprehension, analyzing literature or historical trends, for the discussion of social issues, or for teaching entangled concepts such as "liberal" or "modernism" (Spiro and Meyers 1984).

In general, researchers have found that when effective teachers teach concepts and skills explicitly, they:

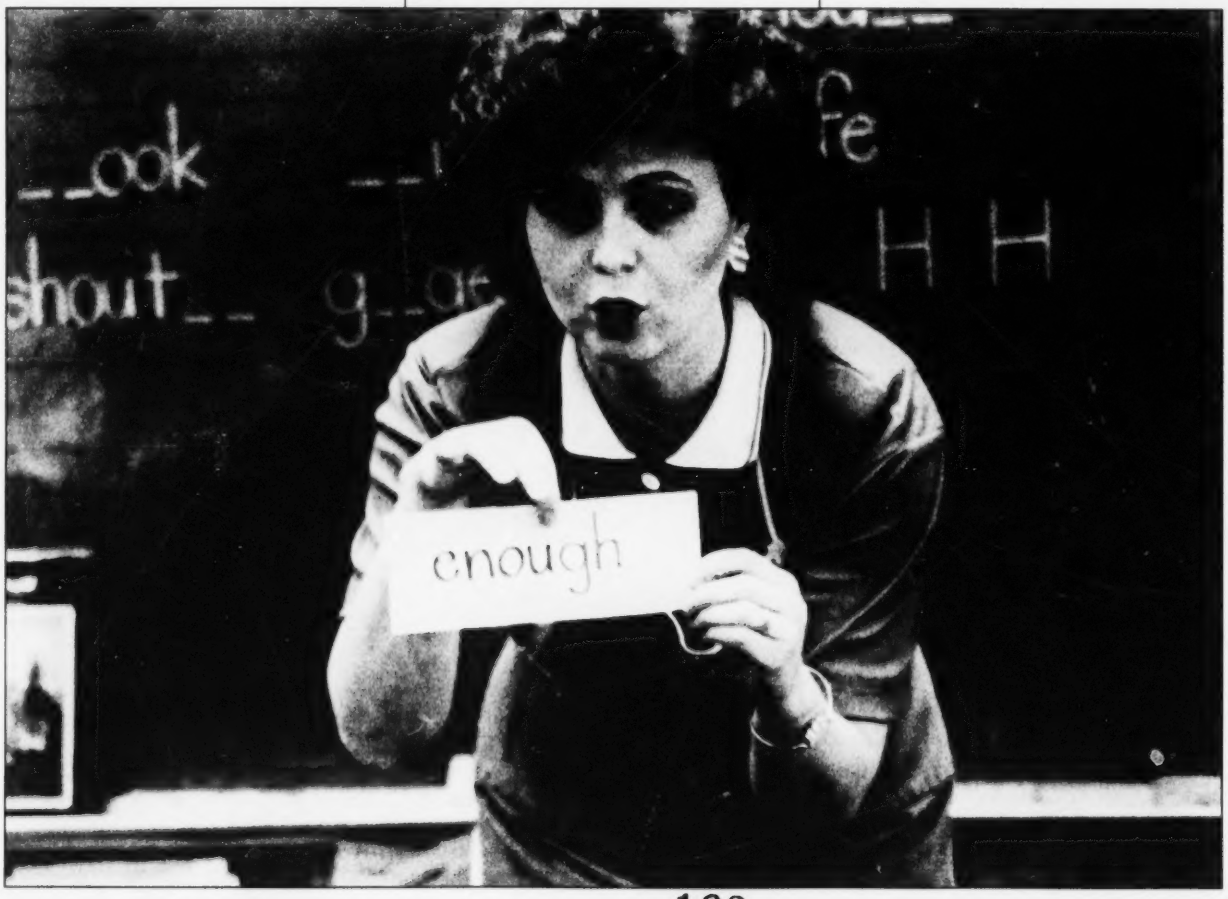
- begin a lesson with a short statement of goals;
- begin a lesson with a short review of previous, prerequisite learning;

"We have to process new material in order to transfer it from our working memory to our long-term memory . . . . We have to elaborate, review, rehearse, summarize, or enhance the material."

- present new material in small steps, with student practice after each step;
- give clear and detailed instructions and explanations;
- provide active practice for all students;
- ask many questions, check for student understanding, and obtain responses from all students;
- guide students during initial practice;
- provide systematic feedback and corrections;
- provide explicit instruction and practice for seatwork exercises and, where necessary, monitor students during seatwork; and
- continue practice until students are independent and confident.

The major components include teaching in small steps with student practice after each step, guiding students during initial practice, and providing all students with a high level of successful practice.

Use and limits. It would be a mistake to say that this small-step approach applies to all students or all situations. It is most important for young learners, slow learners, and for all learners when the material is new, difficult, or hierarchical. In these situations, relatively short presentations are followed by student practice. However, when teaching older, brighter students, or when teaching in the middle of a unit, the steps are larger; that is, the presentations are longer, less time is spent in checking for understanding or in guided practice, and more independent practice can be done as homework because the students do not need as much help and supervi-



Presentation: "You will learn a new word. . ."

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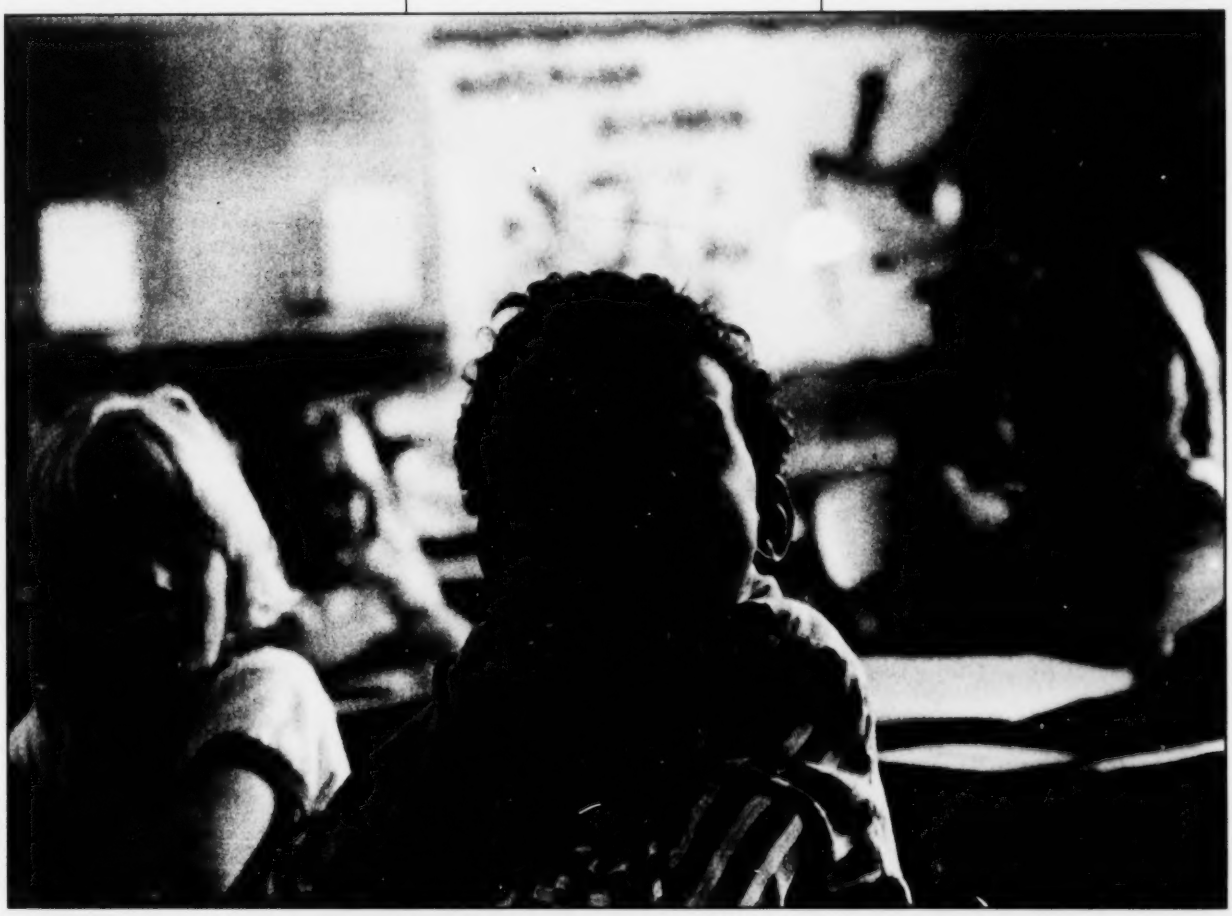

Guided practice: "Read with me ways you can judge if the information you read could be fact."

sion. But even for these situations, it is more efficient to return to small-step instruction when the material becomes difficult.

Information-processing research. A way to understand the need for explicit teaching is to look at recent research on human information processing. The information-processing results apply in three areas: the limits of our working memory, the importance of practice, and the importance of continuing until students are fluent.

First, current information-processing theories suggest that there are *limits* to the amount of information learners can attend to and process effectively. We can only process about seven points at a time in our working memory. When too much information is presented at once, or when the processing demands are too great, our working memory becomes swamped. We become confused, omit or skim material, and do not process it (Tobias 1982).

This is why, when teaching new or difficult material, teachers should teach only a small amount and arrange for student practice after each part so that what is taught at any time is manageable for working memory. In addition, by reviewing relevant learning and by providing an outline, a teacher can help students focus more readily on major points.

A second finding is that we have to *process* new material in order to learn

"Students need a good deal of practice when learning new material, and effective teachers find ways to provide it."

Corrections and feedback. "To check the accuracy and rate of reading words, practice reading the test aloud accurately and as fast as possible while you time yourself."

fer it from our working memory to our long-term memory. That is, we have to elaborate, review, rehearse, summarize, or enhance the material. Students can do this through active practice, which is facilitated if the teacher asks questions, requires students to summarize main points, has students tutor each other, and supervises students as they practice new steps in a skill.

Finally, extensive practice and frequent review are needed after the material is first learned so that it can be *recalled* effortlessly and automatically in future work. When prior learning is automatic, this frees space in our working memory, which can be used for application and higher-level thinking.

We might summarize these three points by saying it is important for the teacher to provide "instructional support" for students when teaching new material. Such support occurs when the teacher (1) breaks material into small steps in order to reduce possible confusion, (2) gives the student active practice in each step in order to move the new learning into long-term memory, and (3) provides for additional practice and overlearning so that the learners are using the new material or skills effortlessly.

"Although daily review is generally recognized as important, it is not as common a practice as we had thought."

Six Teaching Functions

In summarizing the studies on effective teaching, I have divided the results into six teaching functions: review, presentation of new material, guided practice, feedback and corrections, independent practice, and weekly and monthly reviews. Similar functions have also been developed by Good and Grouws (1979) and Russell and Hunter (1981). From students of effective teachers and from research on information processing and human learning, we have learned a good deal about how to use these components successsfully. These results are summarized in Table 1.

These six functions are not new. While all teachers use some of them some of the time, effective teachers use all them most of the time and implement them consistently and systematically. With less effective teaching, review may be infrequent or unsystematic, demonstration may be too short or unclear, students may receive insufficient guided practice, the teacher may correct too few errors, and too much time may be allocated to independent practice and not enough time to demonstration and guided practice.

These teaching functions represent some of what Gage (1978) calls "the scientific basis for the art of teaching." In practice, these ideas require a good deal of art, creativity, and thoughtfulness to apply and modify these ideas for different students and different subject matter.

1. *Daily review.* Effective teachers begin a lesson with a five- to eight-minute review of previous material, correction of homework, and review of relevant prior knowledge. To make sure that the students possess the prerequisite skills for the day's lesson, the teacher can review the concepts and skills necessary to do the next day's homework; have students correct each other's papers; ask about items where the students had difficulty or made errors; and review or provide additional practice on facts and skills that need reteaching.

Daily review is particularly important for teaching material that will be used in subsequent learning, for example, math facts, reading sight words,

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and grammar, and skills such as math computation, math factoring, or solving chemical equations.

One example of effective daily review is in the successful ECRI (Exemplary Center for Reading Instruction) Reading Program (Reid 1978). In this program, five minutes a day are spent reviewing and introducing new words from stories in the reader. The students go over the word lists in unison until they are fluent. When students are reading fluently and easily at the rate of about one word a second, it is possible to review 150 words in less than four minutes. Similar review procedures could be used in a variety of areas.

Table 1. Teaching Functions

1. **Review**
   - Review homework
   - Review relevant previous learning
   - Review prerequisite skills and knowledge for this lesson
2. **Presentation**
   - State lesson goals and/or provide outline
   - Teach in small steps
   - Model procedures
   - Provide concrete positive examples and negative examples
   - Use clear language
   - Check for student understanding
   - Avoid digressions
3. **Guided practice**
   - High frequency of questions or guided practice
   - All students respond and receive feedback
   - High success rate
   - Continue practice until students are fluid
4. **Corrections and Feedback**
   - Give process feedback when answers are correct but hesitant
   - Give sustaining feedback, clues, or reteaching for incorrect answers
   - Provide reteaching when necessary
5. **Independent practice**
   - Students receive help during initial steps, or overview
   - Practice continues until students are automatic (where relevant)
   - Teacher provides active supervision (where possible)
   - Routines are used to give help to slower students
6. **Weekly and monthly reviews**

Independent practice: "Write so readers can share an experience."

Daily review was also part of the successful experimental study in elementary mathematics (Good and Grouws 1979). In this study, the teachers who had been trained conducted review and checked homework 80 percent of the days they were observed, whereas teachers in the control group did so on only 50 percent of the days. This suggests that, although daily review is generally recognized as important, it is not as common a practice as we had thought.

2. *Presenting new material.* Research has shown that effective teachers of mathematics spend more time on presenting new material and guided practice than do less effective teachers (Evertson et al. 1980, Good and Grouws 1979). For example, in the Evertson study the most effective mathematics teachers spent about 23 minutes per day in lecture, demonstration, and discussion in contrast to 11 minutes for the least effective teachers. The effective teachers used this additional presentation time to give additional explanations and many examples, check for student understanding, and provide sufficient instruction so that the students could practice independently with minimal difficulty. In contrast, the less effective teachers gave much shorter presentations and explanations and then sent the students to independent practice. Under those conditions students were less successful because they were not yet ready for independent practice. Hence, they made too many errors and had to be retaught.

The first step in effective presentation of new material is to focus learners' attention. This is done by providing students with a short behavioral objective, such as "At the end of this lesson you will be able to distinguish between metaphor, simile, and personification," or "Today you will be able to do problems using two-digit multiplication." These objectives reduce the complexity of the presenta-

Corrections and feedback: "I check your notebooks for dates, formation of letters, neatness and content of what is written. I record a plus sign if they are correct and reteach if they are not."

tion and help teachers to focus and avoid confusing digressions.

Effective teachers then proceed by presenting one point at a time using many examples. The examples provide the concrete learning and elaboration that is useful for processing a manageable amount of new material.

Explicit instruction from the teacher not only helps the learner focus, it also reduces ambiguous processing. It is important for the teacher to avoid ambiguous phrases such as "sort of," "as you see," and "a few." These phrases lack clarity and may confuse learners (Smith and Land 1981).

Effective teachers also stop to check for understanding by posing questions, asking students to summarize the presentation to that point or to repeat directions or procedures, or asking students whether they agree or disagree with other students' answers. This checking tells teachers whether they need to reteach the material.

The wrong way to check for understanding is to ask, "Are there any questions?" and, hearing none, assume that the students have learned the material. Another error is to ask a few questions, call on volunteers to hear their (usually correct) answers, and then assume from hearing the volunteers that the class understands and has learned.

The following suggestions for effective presentation have emerged from the experimental and correlational classroom literature.

- State lesson goals.
- Focus on one thought (point, direction) at a time, i.e., complete one point before beginning another.
- Teach in small steps, checking for understanding on one point before proceeding to the next.
- Give step-by-step directions.
- Model the behaviors by going through the directions.
- Organize material so that one point is mastered before the next point is given.
- Avoid digressions.

3. *Conducting guided practice.* After the presentation, or after short segments of the presentation, the teacher conducts guided practice. A major purpose of this activity is to supervise students' initial practice on a skill and provide the active practice, enhancement, and elaboration necessary to move new learning from working memory into long-term memory.

The length of the presentation segment prior to guided practice is open to debate. Some people advocate that when teaching explicit concepts such as metaphor or simile, or explicit skills such as two-digit multiplication or determining common multiples and least common multiples, the guided practice should begin after a short presentation, and this pattern of short presentation and guided practice should continue throughout the lesson. Others advocate presentations of 8–10 minutes before beginning guided practice. As little research directly informs this issue, a teacher might experiment with different lengths and learn which is more effective for different students and different skills.

During guided practice, students actively participate by working problems or answering teacher questions. A number of correlational studies have shown that the teachers who effectively obtained larger gains in student achievement asked many questions (Stallings and Kaskowitz 1974; Stallings et al. 1977, 1979; Soar 1973; Coker et al. 1980). During successful guided practice, two types of questions are usually asked: those calling for specific answers, and process questions, which call for an explanation of how an answer was found. In a correlational study of junior high school mathematics instruction (Evertson, Anderson, and Anderson 1980), the most effective teachers asked an average of 24 questions during the 50-minute period, whereas the least effective teachers asked only 8.6 questions. The most effective teachers asked six *process* questions per period, whereas the least effective teachers asked only 1.3. In two experimental studies (Anderson et al. 1979, Good and Grouws 1979), teachers were taught to follow the presentation of new materials with guided practice, using a high frequency of questions; in each study, students in the experimental groups had higher achievement than did students in the control groups.

In all these studies, it is the frequency of practice that is most important. Students need a good deal of practice when learning new material, and effective teachers find ways to provide it. For example, when teaching concepts such as phrase and clause or past, present, and future participle, the guided practice could consist of the teacher giving examples and having the students identify them and explain their answers, and later, having the students create their own examples. At each step, the guided practice continues until the students are fluent. (The amount of practice can be increased if the teacher also asks the class to signal whether they agree or disagree with an answer by raising their thumbs up or down.)

When teaching procedures such as two-digit multiplication, the guided practice consists of practicing the skills in small steps with teacher supervision. Some students practice at the board while others work at their seats. When the teacher feels they are ready, the students proceed to the next step. If they are not ready, the teacher gives additional practice.

When teaching a more elaborate skill, such as the steps in dissecting, a

lesson in computer software, or solving a geometry problem, students might first restate the steps that were taught. If the material is difficult, it might be best for the teacher to ask students to state the steps one at a time so they can correct any confusion. Stating the steps might be repeated until all students are fluent. Then the teacher would supervise as the students begin the actual practice, guiding them through each procedure until they can do the steps without errors.

There are, additionally, two related factors teachers need to consider when providing guided practice: the percentage of answers students give correctly and students' active participation.

- Effective teachers try to ensure a high success rate of student responses to their frequent questions (Fisher et al. 1980, Anderson et al. 1979, Gerstein et al. 1981). For example, in a study of 4th grade mathematics, Good and Grouws (1979) found that 82 percent of the answers were correct in the classrooms of the most successful teachers, whereas the least successful teachers had a success rate of 73 percent. The optimal success rate appears to be around 75–80 percent during guided practice, suggesting that the effective teachers combine success with sufficient challenge. The teachers obtained this success level by combining short presentations with supervised student practice and by giving sufficient practice on each part before proceeding.
- Students need to *actively* practice and process new learning. Teachers often lead this process, during presentation and guided practice, by asking questions of individual students. Students can repeat directions, procedures, or main points, or answer questions on facts and procedures. Instead of calling on one student at a time, imaginative teachers increase the amount of active participation by asking *all* students to:

(1) tell their answer to a neighbor;

(2) summarize the main idea in one or two sentences, writing the summary on a piece of paper, and sharing this or repeating the procedures to a neighbor;

(3) write the answer on a chalkboard, which is then held up;

(4) raise their thumb if they know the answer (thereby allowing the teacher to check the entire class);

(5) raise a finger if they agree with an answer someone else gave; and

(6) raise different colored cards when the answer is a, b, or c.

Group active participation is particularly useful when teaching students to identify parts of things or to discriminate among similar concepts. Examples of identification include teaching sight words, new words, parts of a plant, parts of a book, or parts of a dictionary. Discrimination includes learning to differentiate between similar concepts such as the Senate and the House of Representatives, or between adverbs and adjectives.

The purpose of all these procedures (cards, fingers, writing answers on a sheet of paper) is to provide active participation for the students and to allow the teacher to see how many students are correct and confident. If these overt procedures seem too childish, an alternative would be to have students write their answers and immediately grade each others' papers. (Some teachers have told students that they need feedback on how well the class is doing, and if the students won't participate overtly, then they can take an exam. . . .)

4. *Provide feedback and correctives.* During guided practice, checking for understanding, or any recitation or demonstration, how should a teacher respond to a student's answer? If a student is correct and confident, the teacher can simply ask another question or give a short statement of praise (e.g., "very good") while maintaining the momentum of the practice. However, if the student is correct but hesitant, it is important to tell the student that the answer is correct. In such cases, it is also useful to give "process feedback." Process feedback, a term developed by Good and Grouws (1979), refers to the teacher saying, "Yes, that's right, because. . ." and then proceeding to re-explain the process one goes through to get the correct answer. Such reteaching or process feedback gives learners the additional explanation that is sometimes needed when they are still unsure.

When a student has made an error, it is appropriate for the teacher to simplify the question, provide hints, or reteach the material. The important point is that errors should not go uncorrected; it is inappropriate simply to give the correct answer and move on.

In their review of effective college teaching, Kulik and Kulik (1979) found that instruction was more effective when students (a) received immediate feedback on their examination and (b) had to do further study and take another test when their quiz scores did not reach the criterion. Both points seem relevant to this discussion: students learn better with feedback—as immediate as possible—and errors should be corrected before they become habitual.

Independent practice: "You will take a pupil partner spelling test."

Highlights of Research on Explicit Teaching of Well-Defined Knowledge and Skills

Six teaching functions aid student learning of explicit, well-structured information and skills such as mathematical procedures, science facts and concepts, grammatical rules, and vocabulary.

1. Each day, start the lesson by correcting the previous night's homework and reviewing what students have recently been taught.

2. Tell students the goals of today's lesson. Then present new information a little at a time, modeling procedures, giving clear examples, and checking often to make sure students understand.

3. Allow students to practice using the new information under the teacher's direction; ask many questions that give students abundant opportunities to correctly repeat or explain the procedure or concept that has just been taught. Student participation should be active until all students are able to respond correctly.

4. During guided practice, give students a great deal of feedback. When students answer incorrectly, reteach the lesson if necessary. When students answer correctly, explain why the answer was right. It is important that feedback be immediate and thorough.

5. Next, allow students to practice using the new information on their own. The teacher should be available to give short answers to students' questions, and students should be permitted to help each other.

6. At the beginning of each week, the teacher should review the previous week's lesson and at the end of the month review what students have learned during the last four weeks. It is important that students not be allowed to forget past lessons once they have moved on to new material.

These steps may be less important and are not sufficient for less well-defined topics, such as writing a term paper, a research report, or analyzing literature.

5. *Conduct independent practice.* By the end of guided practice, students are expected to do the steps correctly, but hesitantly. Independent practice provides the additional practice that students need to become fluent in a skill, and to enable them to work without the cues given during guided practice. This need for fluency and independence applies to many of the procedures that are taught in school: use a rule to measure widths, add decimals, read a map, conjugate a regular verb in a foreign language, proofread copy for errors, write major chords, complete and balance a chemical equation, operate equipment, and apply safety procedures. This need for fluency also applies to facts, concepts, and discriminations that are to be used in subsequent learning. After substantial practice, students achieve an automatic stage where they are successful and rapid and no longer have to think through each step. Students who have reached this automatic stage can give their full attention to comprehension and application.

The independent practice should be on the same material as the guided practice. For instance, if the guided practice was on identifying types of sentences, then the independent practice should be on identifying types of sentences or, perhaps, creating individual compound and complex sentences. It would be inappropriate in this case to assign independent practice that asked students to "write a paragraph using two compound and two complex sentences" because the students have not been sufficiently prepared to do this.

Independent practice is really a continuum in which the students begin their work under teacher supervision and conclude with homework without supervision. When the material is difficult, more time is spent in supervised independent practice; when the material is easier, more of the independent practice can be done as homework.

Teachers also need to consider both their own role when students are practicing independently and how students can help each other.

- Investigators have found that students are more engaged during seatwork when the teacher circulates around the room and monitors and supervises their work (Fisher et al. 1978). However, these contacts should be relatively short, averaging 30 seconds or less.

The same researchers found that students of teachers who spend more time in guided practice are more engaged during seatwork; in contrast, when teachers give a great deal of explanation *during* seatwork, students make more errors (Fisher et al. 1978). Lengthy explanation during seatwork indicates that the initial teaching and guided practice were not sufficient.

- Some investigators have developed procedures by which students help each other during seatwork (see Johnson and Johnson 1984, Sharon 1980, Slavin 1980b). Research shows that all students usually achieve more in these cooperative settings than do students in regular settings (Slavin 1980b). Slavin's manual (1980a) explains how these procedures can be used in classrooms. Presumably, some of the advantage comes from students having to explain the material to someone else or listening to someone other than the teacher explain the material (Webb 1982). Cooperative/competitive settings also help slower students by providing extra instruction for them during seatwork.

6. *Weekly and monthly review.* Some of the successful programs in elementary schools provide for frequent review. For example, Good and Grouws (1979) recommend that teachers review the previous week's work every Monday and the previous month's work every fourth Monday. These reviews and tests provide additional successful practice for students. Kulik and Kulik (1979) found that even college students who were given weekly quizzes scored better on final exams than did students who had only one or two quizzes during a term.

In sum, explicit instruction in well-structured areas is a process in which the teacher initially takes full responsi-

Table 2. Modifications to Suit Different Students

Slower Students
More review
Less presentation
More guided practice
More independent practice
Faster Students
Less review
More presentation
Less guided practice
Less independent practice

bility for performing a task but gradually relinquishes responsibility to the student (Lohman 1985, Pearson and Gallagher 1983). This progression can be seen as a continuum that moves from teacher modeling, through guided practice using prompts and cues, to independent and fluent performance by the learner.

Gains in Achievement—and in Attitude

The six functions I have described can be modified to suit different learners (see Table 2). When students are faster or older, or when the material is less difficult, less review is necessary and more time can be spent on presenting new material. There is also less need for guided practice and independent practice in class, and more of the independent practice can be done as homework because the students do not need as much help and supervision.

What is novel about current studies of effective teaching is that they have provided a research base that comes from experiments conducted in classrooms with regular teachers teaching regular subject matter. The results have consistently shown that when teachers teach more systematically, student achievement improves—frequently with gains in students' attitudes toward themselves and school.□

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Barak V. Rosenshine is professor of educational psychology, Department of Educational Psychology, College of Education, University of Illinois at Urbana-Champaign, 210 Education Building, 1310 S. Sixth St., Champaign, IL 61820- 6990.

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GERALD G. DUFFY AND
LAURA R. ROEHLER

The Subtleties of Instructional Mediation

Instructional leadership involves more than increasing time-on-task. Supervisors must be able to help teachers develop students' understanding of difficult ideas.

Instruction is more than getting students on task and presenting content in organized ways. It is also a cognitive interaction between teacher and students, particularly when the goal is to develop conceptual understandings rather than automatized responses. Such instruction is much more subtle than earlier concepts of instructional effectiveness have led us to believe, and it requires much more substantive supervision.

The Subtleties of Instruction

Humans make sense of their environment by constructing understandings from the experiences they encounter. Students are no different. The tasks they encounter in their school experiences lead them to build understandings about what to pay attention to, what is important, and how to behave. Their understandings do not occur instantly, however. When they come to school students already possess conceptions about what they are to learn. When teachers provide reading tasks, for instance, the students' old conceptions are not immediately erased and replaced with a new understanding. Instead, students combine the new school task with their old understandings and build new conceptions.

"Students restructure school tasks, creating understanding that may be different from what the teacher intends."

These modifications are not always what the teacher intends. Students who are repeatedly given reading seatwork tasks that keep them busy come to understand, for example, that the task is "to get done" rather than to learn to read (Anderson 1985). Hence, one subtlety of instruction is that *students restructure school tasks*, creating understanding that may be different from what the teacher intends.

Instruction is also more than creating tasks; teachers help students *interpret* these tasks by the way they talk about them. Ultimately the students construct understandings largely from what the teacher says or leaves unsaid. In a recent study of teachers who talked about reading as a strategic task and others who did not, the students of the former teachers came to understand that they must be strategic when reading, while the students of the latter group of teachers demonstrated little understanding that reading involves strategies (Duffy et al. 1985). *The influence of the teacher's talk* is a second instructional subtlety.

A third subtlety is that *instruction is interactive*. That is, after providing information about a task, the teacher observes students as they try to do the task, notes their restructured under-

Table 1. Interpreting Instructional Interaction

The Instructional Interaction	Interpretation
T: This time I want you to choose the main idea by yourself and see if you agree with the person whom I will ask to do it aloud.	The teacher provides directions for using the skill in a paragraph. The paragraph to be read is part of an article in a language arts text.
S: (Students silently read a paragraph about groups of people bringing words to the English language.)	
T: All right. Have you done all the steps and chosen the main idea? John, what did you choose?	The teacher asks for a response.
S: People came to America.	Student provides an answer. Teacher notes the answer and determines that he misunderstood how to figure out the main idea. The teacher decides on what additional information to present.
T: I'm going to give all of you a clue. In this particular paragraph, it (the main idea) is not stated. There is no single sentence that really tells you the main idea so you are going to have to sit back and say to yourself, "What one thing is this paragraph mostly about?" Remember I did that on the one I showed you? All of you do that, if you haven't already.	Having decided that the students were looking for stated main ideas, the teacher reminds them of the model she provided for how to figure out implied main ideas.
S: (Students are silent.)	Students try to apply the cue provided by the teacher.
T: Now, John, do you have the main idea?	The teacher asks for a response.
S: Yes. People brought language.	Student provides an answer.
T: Would you tell us what you did so we will know how you came up with that answer?	The teacher asks for the process John used to see how he arrived at his answer.
S: I read the whole paragraph.	John tries to articulate what he did. The teacher assesses and decides what to say next.
T: All right. You read the whole paragraph. Then what did you do?	The teacher prompts John to see if he can tell her more about how he got his answer.
S: I thought about what it was all about and that was my main idea.	The student provides additional description. The teacher assesses his answer and decides that he is not attending to one important thing. She then decides what to say next.
T: That's good thinking, John. He gave us a main idea. But I think one important piece is missing.	The teacher reinforces John for what he did well but states that one more thing needs to be attended to. She is cueing the students to an elaboration that she is about to provide.

standings, and provides additional information to help them refine their understanding. Both the teacher and the students actively mediate information during this interactive exchange. The students mediate the teacher's initial instructional information in terms of their old conceptions, creating restructured understandings. The teacher mediates what students say and do in performing the task, using this information to decide how to respond. This fluid cycle of responsive information exchanges between teacher and students continues until the teacher is satisfied that the students have learned the intended outcome. This responsive cycle is the heart of instruction.

Finally, *instruction* is subtle because it is *longitudinal*; it occurs over time. When teachers talk to students about being strategic readers, for instance, students do not immediately understand what that means. But as the teacher continues to assign reading tasks and to talk about how to do them strategically, the students' restructuring continues. Over time, they modify and refine their understandings, eventually building conceptions similar to what the teacher has in mind. The change is gradual.

"Teachers help students interpret tasks by the way they talk about them."

T: Remember earlier in the lesson when I said that I take all the important ideas, think about how they go together, and tie them together with the one idea they all seem to have in common? That's what is needed here. Do like I did. Think about what the ideas describe for you and how those all go together. Tie all the important ideas together.	The teacher provides an elaboration on her original explanation, reminding them of previously provided information and emphasizing how to "tie ideas together."
S: (shouting out) I just got one.	Student responds.
T: All right. What did you think, Mary?	Teacher asks for answer.
S: Each group of people brought their own set of words.	Mary provides an answer and the teacher assesses, deciding what to say next.
T: That's pretty close to it. I could accept that. I would not argue with that. Scott?	The teacher reinforces the answer and asks for another response in order to have more data before elaborating.
S: After a while, these words became part of our language.	Scott answers. The teacher assesses and decides what to say next.
T: Let's look at Scott's answer. We've read the whole paragraph. We've sat back and thought, "What one thing is this all about?" We know it's talking about groups of people, their language, and how some of ours became theirs. Scott's main idea doesn't quite tie all those ideas together. The key is the tie between all those ideas.	The teacher, having assessed both answers, decides that they do not yet understand how to tie the ideas together. She elaborates by reemphasizing the need for a tie across all ideas.
T: You have a changed one, Scott?	The teacher asks for an answer.
S: We borrowed words from other places, and they borrowed words from us.	The student provides a re-stated main idea. The teacher assesses Scott's restructured main ideas.
T: Okay. I think Scott gave a good one. He tied all the ideas together. The tie was the borrowing of words.	The teacher reinforces Scott's combining of ideas into a main idea.
T: Notice, we don't always say what the main idea is in the same way. But we should come close to each other.	The teacher states the individual nature of cognitive processing.
T: The main idea needs to tie together all the important ideas.	
T: Let's look at page 4, the last paragraph.	The teacher moves to another example to provide other opportunities for guided practice.

"A fluid cycle of responsive information exchanges between teacher and students continues until the teacher is satisfied that the students have learned the intended outcome. . . . This cycle is at the heart of instruction."

How a Mediated Reading Lesson Works

The subtleties of verbal mediation are found in virtually all lessons. To illustrate, let's examine table 1, a 3rd grade teacher's reading lesson on main idea, one of hundreds of low reading group lessons we and our colleagues have studied during the past four years (Roehler 1984, Duffy et al. in press a, Duffy et al. 1985). The excerpt begins with the teacher providing guided practice to help students use a skill she has just finished modeling. In Pearson's language (1985), she is "gradually releasing the responsibility" so students can independently use it. Note that (1) the students restructure information from the teacher; (2) the teacher's talk, as well as the task, shapes student understanding; (3) the teacher and students engage in an interactive cycle in which the teacher presents information, students restructure it, the teacher elaborates, and students restructure it again; and (4) student understanding develops over time, not in a single interchange of information.

The teacher in the table 1 example is effective not only because she has high time-on-task and logically organized lessons, but also because she (1) makes substantive statements about how to do the task, (2) asks for answers to assess how students have restructured her explanation, and, on the basis of these responses, (3) provides still more information. Less effective teachers, in contrast, do not note student restructuring and do not engage students in instructional interchanges designed to provide a mediational bridge between the students' current understandings and the ultimate outcome.

Implications for the Supervision of Instruction

When viewed through the lens of reciprocal mediation of information, instruction is a much more subtle enterprise than research on student engagement and sequential lesson events leads us to expect. Consider time. We know that if students pay more attention they learn more. It seems, therefore, that the key to effective instruction is accumulating more student time-on-task. However, the teacher's talk during this time is also crucial, because the understandings students construct reflect what the teacher says. For instance, we observed two teachers teaching a lesson on context clues. Although they engaged students for equal amounts of time, they created startlingly different student understandings by saying different things during verbal exchanges (Duffy et al. in press b).

Similarly, it is not enough simply to ask students questions. While questions are interactive and get students on task, they rarely contain enough substantive information for students to restructure their understandings. This is particularly so for low-achieving students. Because their backgrounds about how reading works are sparse and because most classroom questions contain little substantive information, questioning alone leaves low group students with virtually nothing

"Instruction can no longer be viewed as a static script to be prescribed in advance. Even the teacher's lesson plans are temporary documents that must be modified . . . ."

with which to construct new understandings.

Merely to follow the steps in a particular lesson format is not enough either. Because students progressively structure their understandings day after day, instruction does not always start with step one of a lesson. Instead, instruction is a series of conceptually cohesive encounters over time. Consequently, while a teacher may use a particular lesson format to introduce something new, subsequent lessons may begin at various points in the format or repeat components of the lesson covered earlier. Where the teacher begins the lesson on any given day depends on his or her assessment of the students' restructured understandings at that time.

Finally, instruction can no longer be viewed as a static script to be prescribed in advance. Even the teacher's lesson plans are temporary documents that must be modified as the dynamic and responsive instructional exchange unfolds. No one can accurately predict students' restructured understandings or what the appropriate teacher response should be. Consequently, instructional leaders must help teachers make spontaneous decisions about how to verbally mediate students' understandings.

A New Dimension of Leadership

The teacher's role as a cognitive mediator adds a new dimension to our understanding of instruction and a new challenge for instructional leaders. To help teachers verbally mediate students' understandings of conceptual learnings is a more difficult leadership role than to ensure adequate task engagement or adherence to certain lesson plan formats. It is, however, a role that gets at the heart of effective instruction.□

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Gerald G. Duffy and **Laura R. Roehler** are professors of education in the Institute for Research on Teaching, Michigan State University, 201 Erickson Hall, East Lansing, MI 48824.

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"You Ask the Wrong Questions!"

JOHN BARELL

The teacher effectiveness research provides a foundation for teaching thinking because, properly understood, it stresses the search for meaning.

Barbara—the mother of Lisa, a 5th grader—recently asked her daughter about two concepts Lisa was studying for a test the next day.

"Lisa, can you tell me the difference between kinetic and potential energy?"

"No," Lisa replied.

"Okay, can you give me some examples of potential energy then?"

"Mother! You're asking me the wrong questions!" Lisa said in desperation.

"What do you mean?"

"What the teacher is going to ask on the test is 'Potential energy is _____' and 'Kinetic energy is _____.' That's *all!*"

This situation illustrates the importance of teaching for meaning. The current teacher effectiveness research is foundational both for learning what kinetic energy is and for the deeper, more complex understanding of how it relates to potential and other forms of energy and motion.

This research, which stems largely from elementary schools where we are teaching children how to read and do mathematical computations, presents us with structures and processes that are important at both ends of a continuum: at one end focusing on highly structured, sequential content, while at the other end examining complex human or physical problems from a wide variety of perspectives generating multiple meanings and interpretations. Teachers in both instances are engaged in a similar task: helping students find or create meaning out of experience.

Susan and Carolyn

Recently I observed 2nd graders reviewing fundamental math operations. In the same school I observed 5th graders engaging in complex reasoning in their analysis of a Wallace Stegner story, "The Colt." It is interesting to see just how the effective teaching research applies to both teachers as they challenge students to think about content at rather different levels, or at different points on the continuum, from seemingly simple and concrete to more complex and abstract.

Susan, the 2nd grade math teacher, was reviewing the composition of the number 17.

"How many tens, Mark?"

"How many ones, Jan?"

"Where do we put the 10, Gloria?"

"Where do we put the 7, Steven?"

"If we wish to prove this, what do we have to do. . . Billy?"

She proceeded in this fashion with direct questions to ensure that students recalled just how to analyze the number 17, how to prove their work if they were subtracting 17 from 38 or 9 from 18. She maintained that "brisk pace" we read about in the teacher effectiveness literature (Barnes, 1981) with many questions at a lower cognitive level. She made certain that she gave most students an opportunity to respond in order to ensure comprehension, and she provided many and diverse examples both at the board

John Barell is Associate Professor, Department of Curriculum, Montclair State College, Upper Montclair, New Jersey.

and on a worksheet in front of all students. She was thus engaged in what Rosenhine (1983) has called "overlearning. . .to the point where [facts and skills] are automatic."

What I witnessed was not the 20 minutes that Good (1982) recommends for the developmental phase of a mathematics lesson. This was a review. But many elements of direct or active teaching were present: tightly controlled teacher structure, a brisk pace with many questions, and a great diversity of examples to check comprehension. The result was active student engagement in the learning task with a high degree of success.

Carolyn's task was significantly different. She was reviewing "The Colt" with her 5th graders, who had read the story some time ago. Her challenge to them, after reviewing the plot and the major characters, was to analyze the characters using Kohlberg's (1975) levels of moral development. Students proceeded to take one character at a time—Pa, for example—and to analyze his behavior according to the levels of moral reasoning, adapted and slightly modified for this purpose.

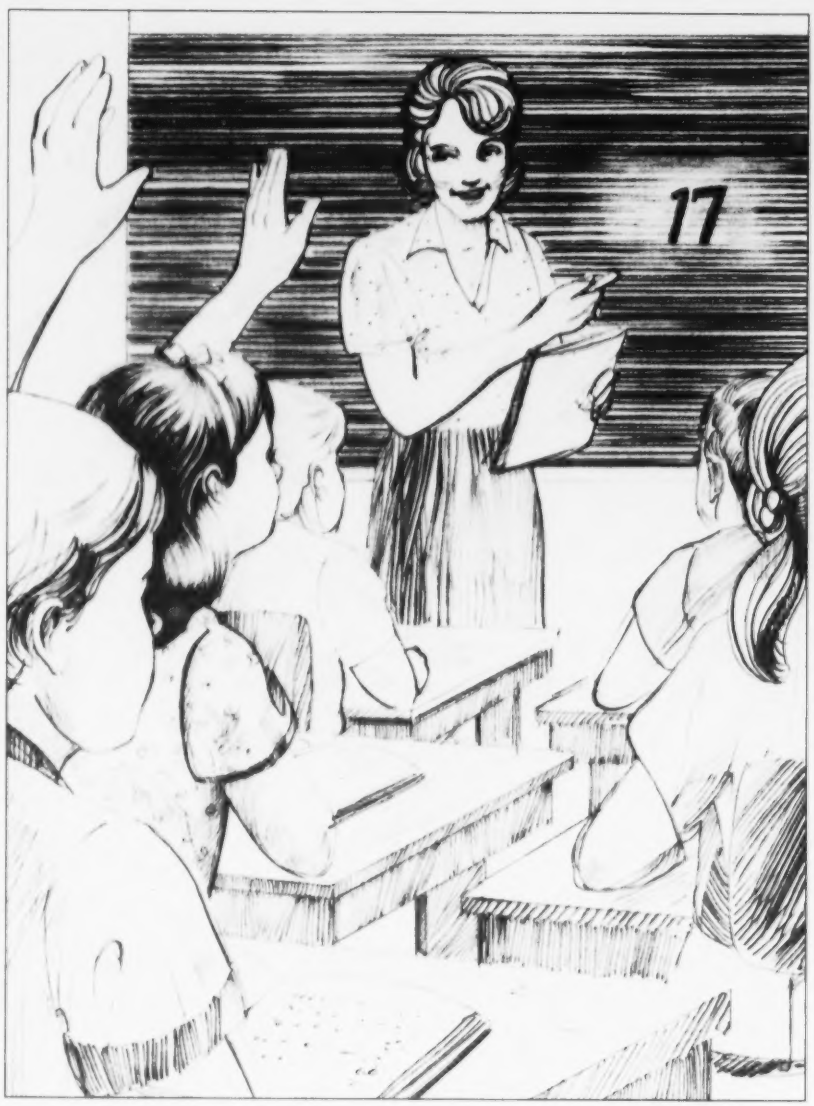
"I think he was a three, because he had no really different ideas of his own."

"I disagree. I think he was a one, because he really didn't know right from wrong."

"Can you give us some examples of that, Beth?"

"Sure." And Beth proceeded to elaborate on her argument.

This interaction proceeded for about ten minutes with hands raised,



Active Teaching: "How many tens, Mark? How many ones, Jan?"

"Too often we forget to set the stage for learning by helping students recall what they have already learned."

reasons clearly and openly expressed, until someone said:

"Based on what Steven just said, I think he's a five because he really wanted to change things."

Carolyn finally asked her students why analyzing a story was different, if it was, from analyzing the fairy tales they had read and analyzed earlier.

"Because the characters are presented differently. . .they're more difficult to understand. . .fairy tale people are simple—not like humans."

Now, Carolyn's teaching task was more complex; her students were making judgments based not only on their recall of facts, but also from listening to the judgments of their peers. When I heard Tony say he had changed his mind about Pa, I recalled Johnson and Johnson's (1979) research relating cognitive development to constructive classroom disagreements, conflicts, and taking the other person's point of view.

Major Differences

Obviously, there are significant differences in what Susan and Carolyn were attempting to do, how they structured their classroom situations on those days, and how they interacted with their students. These differences are especially evident in four areas.

Content: Susan was reviewing highly structured and sequenced material. Knowledge of how to solve arithmetic problems is well known, or so it might seem. Because answers are predictable and controllable, this kind of content lends itself to statements of behavioral specificity.

Carolyn, on the other hand, was dealing with a more complex body of content, one that had no right or wrong answers that could be measured with the kind of precision that is possible in teaching equations. Her students were thinking about a problem given, as Heidegger (1968) noted, to a "multiplicity of meanings": this "is the element in which all thought must move in order to be strict thought" (p. 71).

Content in both classrooms was significant, appropriate, and in accordance with students' cognitive developmental levels. It would have been interesting to analyze the reasoning of Carolyn's students to see how many of them might be using abstract concepts to support their arguments.

Teacher Roles: Susan was playing an active, direct role in controlling the classroom interaction. She posed all the questions and called on students at random to check comprehension. Carolyn similarly directed the discussion by posing all the questions, but she spent much more time saying nothing and listening to her students' judgments. She didn't even have to ask students to listen to what their classmates were saying; they listened automatically. Students were in control of making their own judgments and changing their minds. They controlled the length and the quality of the time because of Carolyn's nondirectiveness, which was perfectly appropriate.

Thus, teacher control varied from strictly direct with Susan to more shared-with-the-students in Carolyn's classroom.

Engagement Time: Susan may have been more concerned with "allocated time, engagement rate, and success rate on school activities" because these factors are all directly related to student achievement (Denham and Lieberman, 1980). Carolyn's more free-flowing discussion was not as concerned with "success" in answering lower cognitive level questions. As she said, "I want the time to go on and on so they can feel free to allow ideas to come to them when they're ready. Sort of like brainstorming. The more time some of them have, the clearer their thinking—or the more opportunity they have to think about somebody else's argument." We do not expect Carolyn to move through her discussion at a brisk pace, keeping all students verbally involved with appropriate answers. Thinking takes time, and far too many of us inappropriately model Susan's behavior when confronting complex physical, social, or human problems.

Outcomes: The learning outcomes in Susan's class were easily measurable and highly focused. The outcomes within Carolyn's classroom can also be observed. They are, however, not as precisely focused and may be approached from a variety of perspectives or levels of difficulty: Did the students understand the story? Do they know Kohlberg's levels of moral development? Can they apply an external set of standards to a story? How well do they reason? For example, can they support their conclusions with evi-

dence? Can they identify assumptions, cause-effect relationships, and counter examples? These intellectual processes are more difficult to teach and measure, but not impossible.

These differences between Susan's and Carolyn's classrooms are directly related to the teacher effectiveness literature that emerges from elementary and junior high schools, where standardized achievement tests have been used to observe teachers' "effectiveness."

Foundational Elements

Within the teacher effectiveness research we have a knowledge base ("craft knowledge," as some call it) that structures and supports the learning task, just as the shell of a newly constructed house frames all the individual and creative appointments within the finished dwelling. To use a different analogy, this craft knowledge may provide the underlying structure for growth of the musician, from memorizing the scales to creating improvisations or variations on a theme by Beethoven. Learning scales and improvising themes require understanding the relationships, for example, between C Major and Minor and between triads, fifths, and sevenths. Individuals who do not understand these terms and how they are derived will have a difficult time growing from the rote learning phase to the point where they can think musically—that is, independently.

Structure for Learning

This research presents us with a well-delineated pattern for teacher behavior. Barnes (1981) presents these elements of "systematic instruction": (1) preparing students for the lesson, (2) teacher presentation of the lesson, (3) student practice after presentation, and (4) evaluation of student learning.

Good (1982) presents this model from the Missouri Mathematics Program: (1) daily review, (2) development, (3) seatwork, (4) homework assignment, and (5) special reviews.

It seems superfluous to reiterate that all teaching needs structure, but this research has re-emphasized two significant aspects of this structure: lesson preparation and development.

Barnes identifies four specific behaviors in her review that should be undertaken during the preparation phase: (1) secures students' attention, (2) states objectives, (3) gives or seeks a rationale for the lesson, and (4) reviews previous content.

Similarly, Good's *review* phase includes reviewing "the concepts and skills associated with the homework." In the next phase, *development*, he briefly focuses on prerequisite skills and concepts. It is important, he suggests, for students to see how concepts are related to each other.

Another important notion here is providing a clearly understood framework for learning. This framework consists of students' prior knowledge, the cognitive structures (or schema) within which they integrate such knowledge, and the new objective and its rationale. Too often we forget to set the stage for learning by helping students recall what they have already learned and how this may fit into an overall framework for the new skills or knowledge. Such practices have proven helpful in increasing student reading comprehension (Duffy and others, 1984).

On reading this research literature for the first time, I began to understand more clearly why graduate students sometimes said, in the middle of the semester, "I'm lost. I don't know where all this fits." I found it was necessary at the very beginning of the semester to attempt to create a structured overview of all the major concepts, showing salient relationships, and to return to that every week to help students integrate new learnings within this structure—in other words, to make it more meaningful.

It was evident to me when I observed Susan's classroom that students achieved such a high degree of successful recitation during this review partly because they had a clear academic focus. They had mastered the prerequisite skills and they understood the relationships between tens and ones, and how to prove these relationships. In Carolyn's classroom, similarly, students had mastered the different levels of moral development. They knew the story and they knew how to evaluate characters with a set of criteria. True, Carolyn did not follow the lesson format presented by Barnes, Good, or Rosenshine, but the principle of building on prior learnings that are well integrated within cognitive structures could be seen in the ensuing discussion.

Environment

Barnes' summary identifies two key elements of the learning environment: task orientation and affective supports.

> The terms "work," "task," or "academically-oriented" usually describe classrooms where teachers expect and require students to pay attention, work persistently toward completion of assignments, to exhibit cooperative attitudes, and in general, to concentrate on academic activities rather than socializing (1981, p. 7).

All of these behaviors were certainly evident in Susan's and Carolyn's classrooms. The 2nd graders were most attentive, raised their hands to participate, and socialized very little. Cooperation could be seen in their lack of competing for the teacher's attention with shout outs and "Oooooo, me, me, me!"

It was in Carolyn's classroom that the cooperative attitudes were even more evident. Here, students listened attentively, not only to the teacher but to each other as well.

Of even greater importance for the relationship between teacher effectiveness research and so-called "higher" levels of thinking are the "high achievement expectations" evident in this 5th grade. Carolyn was using an activity suggested to her for gifted students, but her class was composed of average students. Her challenge to these students and their enthusiastic and intelligent responses once again demonstrated to me the truth of the supposition that we often significantly under-challenge our students to think.

"Another broad variable, 'a warm, supportive environment,' was also consistently found to be positively related to student achievement in most of the studies reviewed here . . ." (Barnes, 1981, p. 9). Barnes lists the following teacher behaviors as contributing to such an environment:

1. Accepting student contributions.
2. Giving specific praise.
3. Respecting student contributions to the class.
4. Maintaining an orderly classroom.

Neither Susan nor Carolyn were "gushy" in their praise of students. They were businesslike in responding to student contributions. More important, however, were their acceptance of and respect for student contributions. Both Susan and Carolyn communicated a sense that each child's statement or question was very important. Moreover, I had a sense that the teach-

er was genuinely attempting to think herself into the children's frame of mind in order to understand their reasoning. This is what Buber called "imagining the other side," or visualizing the child's world view. Communicating this sense of respect is as important in these two classes as it is for a high school teacher challenging students to hypothesize about the origin of galaxies, or for a college professor who wishes students to consider this proposition: A woman should be President before the turn of the century.

Of all the factors mentioned in this article, it seems to me that creating this warm, supportive environment is perhaps the *sine qua non* for higher-level thinking. Without trust, open communication, and a willingness to tolerate and encourage differences, little thinking can occur. Thinking requires what Bronowski called "this constant adventure of taking the closed system and pushing its frontiers imaginatively into the open spaces where we shall make mistakes" (1978, p. 113). Going beyond the known into those new, unexplored territories and continents where we seek to make new connections and discoveries is risky business for the 5th graders analyzing Stegner's story and reconsidering his original perspective. The same is true for the adult reconsidering his analysis of a poem or her role as a professional.

Reflective Thinking: "Can you give us some examples of that, Beth?"

Instructional Processes

One of the ways in which teachers promote intellectual exploration of new ideas—as Carolyn did—is through their verbal interaction with students. The teacher effectiveness research speaks to several ways in which we promote learning of basic skills and higher-level mental processes. Barnes' summary cites these different teacher behaviors:

1. Varies question levels.
2. Probes, rephrases, prompts.
3. Waits for some response.
4. Provides answer to question.
5. Asks process questions. ("How did you get that answer?")
6. Stresses students' understanding of meaning.

Susan and Carolyn and teachers in higher grades use these processes as the situation demands. The research does not say we ask only recall questions; it says we ask the kinds of questions we need in order to maintain that active interaction so vital to learning.

Both Susan and Carolyn asked different kinds of questions to recall information, to explain answers with greater clarity, to build on previous comments. Neither one, during my observation, asked the process question, "How did you get that answer?" These process questions *seem* to be seldom used in classrooms, perhaps because we are so "right answer" oriented. Were we more dialogic in our thinking about teaching and learning, we might strive to find what Socrates might call the students' level or point of ignorance from whence we could begin to build new and meaningful relationships.

Finally, Rosenshine's recent summary of teacher effectiveness research stresses "overlearning" certain fundamental skills to the point where they become "automatic" (1983, p. 337). Susan's students solidly knew their addition and subtraction processes. But what did Carolyn's students know

well? They had learned, back in September, October, and November, that what was important in this 5th grade was thinking for yourself as well as thinking about what other people say and showing everybody the courtesy of attentive listening.

Systematic Instruction and Thinking

What helps all of these elements fit together is our definition of thinking. If thinking is the accumulation of knowledge, then certain teaching strategies are in order: presenting information, making certain it is received, and recalling it on demand. Freire (1974) called this the "banking concept" of education.

If, however, we accept Hannah Arendt's definition of thinking, we will proceed differently. Thinking is "the quest for meaning" as opposed to the thirst for knowledge that is verifiable primarily through rules of logic. Thinking proceeds by means of "analogies, metaphors, and emblems" that are the "threads by which the mind holds onto the world. . . . Thinking always 'generalizes,' squeezes out of many particulars . . . whatever meaning may be there" (Arendt, 1977).

Thinking, therefore, is a process of searching for and creating meaning involving the mind's creations—symbols, metaphors, analogies—in an attempt to establish relationships between the world of particulars and the ideas and concepts that give them structure. For example, 2nd graders figuring out one math problem must know how this problem relates to the general concepts of tens, ones, and proofs before they can accomplish the task with understanding. Carolyn's 5th graders are making the characters in "The Colt" more meaningful by applying a different set of lenses (Kohlberg's stages of moral development) to them. Thinking becomes more complex as we move from 2nd to 5th grade, but it is still thinking, searching for meaning.

All the teacher effectiveness research stresses this search for meaning. Barnes (1981) speaks of the teachers emphasizing "students' understanding of meaning." Good (1982, p. 15), in speaking of the Missouri Math Program, noted that "the instructional activity is initiated and reviewed in the context of meaning." The stress that both these researchers place on asking process questions—"How did you get that answer?"—is evidence that students are being challenged to think, not merely recite information mindlessly. In a 3rd grade I recently observed, students were coloring in a chart with nouns and many comparative adjectives (tall, taller, tallest, for example). When I asked what they were doing, a few said, "Coloring in all the *er* and *est* words." They didn't know how adjectives related to nouns or other adjectives. This was a mechanical operation without meaning beyond coloring in the letters.

Goodlad (1984) has noted that almost half the early elementary school students he interviewed for his massive Study of Schooling did not clearly understand what their teachers wanted them to do. We must ensure that learning includes not only knowing how to define kinetic energy but, more important, how to use this concept to explain and compare physical phenomena.

"The real danger in using teacher effectiveness research is that it may become prescriptive, a set of behaviors to be checked off by the supervising administrator."

Conclusion

I have attempted to provide a partial refutation for the claim that current research on teacher effectiveness has no significant implications for thinking at higher grade levels or in more complex human situations. By considering the structure, environment, teaching processes, and the nature of thinking itself, this research may be foundational for more complex thinking.

It is true that thinking in Susan's class is more convergent and concerns content that is much more hierarchical and structured than in Carolyn's class. However, if, with Gilbert Ryle (1979), we view thinking as more like path-creating than path-following, we will see the child's first spelling of "cat" as a thoughtful endeavor.

The real danger in using teacher effectiveness research is that it may become prescriptive, a set of behaviors to be checked off by the supervising administrator. Active teaching should become what Good calls an "orienting concept" that fosters reflective thinking about our own teaching processes and their intended and unintended outcomes. We should use this research to stimulate our critical and imaginative thinking about how to help children, adolescents, and adults search for and create the relationships that result in meaningful learning. □

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RUSSELL GERSTEN AND DOUGLAS CARNINE

Direct Instruction in Reading Comprehension

Research findings support training students in precise, step-by-step strategies to improve their understanding of what they read.

We can be precise.
—Charles Olson (from "The King Fishers," cited by Creeley 1966, p. 171.)

The recent report by the National Commission on Reading (Anderson et al. 1985) concluded:

> *Direct instruction* needs to be distinguished from questioning, discussion, and guided practice. Direct instruction in comprehension means explaining the steps in a thought process that give birth to comprehension. It may mean that the teacher models a strategy by thinking aloud about how he or she is going about understanding a passage. The instruction includes information on why and when to use the strategy. Instruction of this type is the surest means of developing the strategic processing that was identified earlier as characteristic of skilled readers (p. 72).

Fifteen years of research have gone into developing and evaluating direct instruction in reading comprehension at the University of Oregon. This research was based on the proposition that precise principles of instructional design can be developed for instruction even in an area as complex as reading comprehension, and that these procedures can (and should) be empirically investigated. The general model that guided the research (Englemann and Carnine 1982) was originally developed as part of Project Follow Through, a U.S. Office of Education research and training project aimed at improving the academic achievement of low-income students in 20 communities—from Arkansas to New York City.

In Follow Through, we faced a perennial problem, recently articulated by Duffy: "How can teachers, despite the complexities of classroom context, provide instruction beyond the routine level?" (1983, p. 135). In order to work effectively with teachers, Follow Through consultants were forced to make decisions about the structure and nature of reading texts, the nature and sequence of comprehension strategies to be taught in these texts, and the specific procedures used to teach these skills. We focused on what many would consider mundane decisions: the best wording for teachers to use in demonstrating a comprehension skill, the most effective way to correct students' errors, the number and range of examples necessary to ensure mastery of a new concept. While many researchers may treat these topics as separate strands, practitioners play them in concert.

This concern with precision in all details of instruction was particularly alien to educational thinking in the late '60s, when Follow Through originated. Developmental, Piagetian, and psychodynamic models of early childhood education were then in vogue. Many felt that the extremely structured teaching would stifle students' learning (Maccoby and Zellner 1970) or impede teachers' creativity and ultimate effectiveness (Resnick 1981a).

Yet independent evaluations of direct instruction in Follow Through showed that economically disadvantaged students made significant progress in reading comprehension as measured on standardized tests (Stebbins et al. 1977, Guthrie 1977). More recent research has indicated that these students have maintained their elementary school gains in comprehension through high school (Gersten et al. 1984).

Building on the Follow Through experience, a group of researchers at the University of Oregon began to examine the applicability of direct instruction for teaching reading comprehension to students at the intermediate and secondary levels.

Current Problems in Comprehension Instruction

There have been several investigations of how comprehension is actually taught in classrooms. After observing over 600 hours of reading instruction in grades 3 through 6, Durkin concluded:

> Practically no comprehension instruction was seen. Comprehension *assessment*, carried on for the most part through interrogation, was common. Whether children's answers were right or wrong was the big concern . . . time spent in giving, completing, and checking assignments consumed a large part of the observed periods (1983, p. 318).

Duffy and Roehler (1982) collected and analyzed audiotapes of actual comprehension lessons being taught in the primary grades. The majority of teachers in their study merely gave students the right answer without offering explanations or suggesting strategies by which students could reach the right answer.

For example, the following excerpt chronicles a teacher's attempt to instruct students in how to select an appropriate title for a story:

Fig. 1. Components of Direct Instruction

1. **Instruction on *explicit* step-by-step strategy. (When this is not possible or necessary, model effective performance.)**
2. **Student mastery of each step in the process.**
3. **Strategy (or process) corrections for student errors.**
4. ***Gradual* fading from teacher-directed activities toward independent work.**
5. **Adequate, systematic practice for students—using a range of examples.**
6. **Cumulative review.**
7. **Teaching formats that anticipate ("pre-correct") potential errors.**

Teacher: Listen to the story I read you, and I will give you three possible titles. Listen really closely. See if you can pick out a good title for it. (Teacher reads the story aloud.) All right. Now here are some possibilities: "A Trip Downtown," "A New Shirt," "The Shirt That Didn't Fit." Of those three possibilities, which one goes best? Angela?

Angela: "A Trip Downtown."

Teacher: Okay, Tom, what do you think?

Tom: "The New Shirt."

Teacher: Andy, what was your choice?

Andy: "The New Shirt."

Teacher: Susie, how about you?

Susie: "The Trip Downtown."

Teacher: Joe, how about you?

Joe: "The New Shirt."

Teacher: I think the girls decided on "The Trip Downtown," and the boys liked "The New Shirt." Mainly, what was the story about?

Child: A trip downtown.

Child: Getting a new shirt.

Teacher: Getting a new shirt, wasn't it?

Examples like this led Duffy and Roehler to conclude that a typical teacher "only asks for answers . . . , her responses to pupil answers *do not create an understanding of either the main idea or strategy for figuring out the main idea*. Apparently, students are expected to come up with both the answer and the strategy (on their own)" (p. 135). Although some students are unable to develop their own strategies, few teachers can spontaneously think up ways to help them (Durkin 1984), and teachers' guides attached to basal series do not provide the necessary guidance.

Explicit Strategy Instruction

In contrast, the distinguishing characteristic of the approach we examined in the 16 experimental studies is the use of *explicit, step-by-step training* in comprehension strategies. When this was not possible, students were provided with models of appropriate performance followed by extensive practice with immediate feedback.

The purpose in articulating and demonstrating a step-by-step strategy is to show students how a thinking process can lead to accurate solutions, or to demonstrate reasonable attempts at deducing an acceptable answer to a question. In demonstrating a strategy for solving a particular type of problem, the teacher makes each step clear to the student. This overt demonstration and guidance appears to be most important for low-performing students, who do not intuitively devise ways to answer comprehension questions. These students learn to copy the steps modeled by the teacher, however, and later will modify or personalize them. Duffy and Roehler (1982) found that teachers needed the most help with this crucial step of articulating and modeling explicit strategies.

Rather than present a detailed overview of the instructional model (see fig. 1), I think one can get a sense of the model by examining the actual teaching methods used in three experimental studies. The studies involved three different types of comprehension skills: the ability to draw inferences in the context of distracting information, knowledge of story grammar (a technique for comprehending narrative), and the ability to detect faulty arguments (a critical reading skill). The first two studies involved low-achieving students; the third involved average and above-average students. Teaching strategies in these three studies range from the highly detailed approach used in the "distracting information" study, to the looser approach used in the metacognitive story grammar study. Each study focused on teaching students a specific procedure or strategy for dealing with the comprehension.

Drawing Inference in the Context of Distracting Information

In a study by Carnine, Kameenui, and Woolfson (1982), students were taught to draw an inference based on relevant information. Rather than *teach* an explicit strategy, teachers *modeled* its appropriate use by a series of prompting questions. We felt that with a good deal of detailed guided practice and teacher feedback, students' performance could improve dramatically.

To select students for the study, we gave a screening test consisting of a series of passages that contained distracting information. Only students who failed, scoring less than 65 percent on the test, were included in the study. These students were then randomly separated into three groups to

"Demonstrating a step-by-step strategy shows students how a thinking process can lead to accurate solutions, or demonstrates reasonable attempts at deducing an acceptable answer to a question."

"The research demonstrates that the type of questions, the detailed step-by-step breakdowns, and the extensive practice with a range of examples illustrated in our three studies will significantly benefit students' comprehension. The next step is integrating these procedures into reading series and into teacher training programs."

Fig. 2. Sample Passage: "Drawing Inferences in the Context of Distracting Information" Study

John is recovering from a bad cold. His doctor told him to change his eating habits and eat good foods. John went to the local health food store and told the clerk about his problem, "I am tired of being sick all the time. All I care about is eating good food with lots of vitamins."

"I had colds all the time until I started eating fresh foods," the clerk said, "Fresh foods taste so much better than canned foods and have a lot more vitamins. We have the best vegetables in town—they are all organic. Look at these nice carrots. Did you know that carrots have more Vitamin A than any other vegetable, as well as being high in Vitamins D, C, and K. You know, the fresher the food, the more vitamins it has. This batch of carrots just arrived from the largest farm in California. Have you ever seen such big carrots? They had a great growing season down there, so they are especially sweet and tasty. Also, the price is really low. They are only 29¢ a pound. They are a week-and-a-half old and a great buy. Carrots can be prepared in different ways. You can eat them raw or cooked. It wouldn't take many of these big ones to make a nice carrot cake.

"These smaller ones are nice, too. But they are just from a little garden around the corner. They were picked yesterday. Because it rained so much this summer, these carrots are small and don't have as much taste. But they would make good carrot juice. They cost 52¢ a pound. Last year carrots from the same garden were 10¢ a pound, but I guess everything costs more today."

Which carrots do you think John bought—the big carrots or the small carrots?

receive either direct instruction, corrective feedback only, or no intervention. Those who received corrective feedback were given a series of comprehension passages containing distracting information, asked to answer questions, and told whether they were right or wrong. The average score for the corrective feedback group was 23 percent. The control group, at 20 percent, scored only a little lower. The average score for students taught with direct instruction, however, was 63 percent.

A sample passage from the study (fig. 2) ends with a question for the reader: "Which carrots did John buy?" In the first paragraph, John states his criterion for buying food: having lots of vitamins. A sophisticated reader would be able to relate the rule in the second paragraph—"the fresher the food, the more vitamins it has"—to John's criterion to draw the correct inference. Intentionally distracting facts, however, make an inappropriate choice appear attractive. The sweet, tasty carrots from California look inviting (and they are cheap), but they're not as fresh as the smaller, local car-

Fig. 3. Example of a Teaching Format: "Drawing Inferences in the Context of Distracting Information" (adapted from Carnine, Kameenui, and Wolfson, 1982)

Introduction

Teacher:	Read this story carefully; you're going to answer the question at the end. [The subject read the entire story orally. The teacher assisted with any decoding errors.]

1. *Statement of the Problem:* Student reads the question at the end.

Teacher:	Now let's go back to the beginning of the story so we can figure out the answer to the question at the end of the story. First, what does John want?
Student:	Not to be sick all the time.
Teacher:	Right. What's most important to him?
Student:	To eat good food with lots of vitamins.

2. *Discrimination Questions*

Teacher:	Is getting big carrots most important to him?
Student:	No.
Teacher:	Is getting sweet and tasty carrots most important to him?
Student:	No.
Teacher:	Is getting cheap carrots most important to him?
Student:	No.

3. *Review of Problem Statement*

Teacher:	What's most important to John?
Student:	To get food with lots of vitamins.

4. *Identification of Rule*

Teacher:	What does it tell you in the story about getting lots of vitamins?
Student:	The fresher the food, the more vitamins it has.
Teacher:	Good. So what do you have to find out now to tell which carrots John will choose?
Student:	Which carrots are fresher.

5. *Locating and Converting Indirect Information*

Teacher:	Find out how fresh the big carrots are.
Student:	A week-and-a-half old.
Teacher:	Now find out how fresh the small carrots are.
Student:	One-day old.

6. *Making the Text-Based Inference*

Teacher:	How fresh are the big carrots?
Student:	A week and a half old.
Teacher:	How fresh are the small carrots?
Student:	One-day old.
Teacher:	What does that tell you about which carrots John will choose?
Student:	The small carrots.

rots. If students do not carefully discriminate the distracting from the relevant information, they're likely to respond incorrectly. The direct instruction teaching sequence in figure 3 illustrates the level of detail necessary to improve the performance of low-achieving students.

The teaching format in figure 3 shows that the teacher assists and directs the child in crucial steps of the thinking/analysis process. The teacher points out the small steps in the strategy so that children (1) see how a successful step-by-step solution to the problem works, and (2) can correct errors immediately. Teachers, for their part, can see *exactly* where breakdowns occur and can solve particular comprehension problems more easily. If, for example, a child tends to interject inappropriate background knowledge (e.g., "Everyone wants cheaper carrots because my mom says you should always try to buy things that are the cheapest"), the teacher can direct the child back to the exact sentence in the text where John states what he wants. If students inappropriately put themselves in the protagonist's place (e.g., "John wants the sweet carrots 'cause *I* know they're the best"), the teacher can again direct the child back to the text. If, on the other hand, the student has difficulty making the inference from the given information, the teacher can work on that specific problem. With this kind of step-by-step breakdown, teaching becomes more analytical and precise.

Pearson's (1984) synthesis of research on comprehension instruction concluded that "younger and poorer readers benefit from *conscious explicit attempts to alter comprehension strategies* . . ." (p. 229, emphasis added). In contrast, teachers in situations that Duffy and Roehler observed tended to ask the same question repeatedly until someone in the group came up with a correct answer.

Almost as crucial as helping students with their mistakes is gradually withdrawing teacher guidance until students can apply a strategy independently. The teacher continually assesses how the child is doing and, when the child is performing well, slowly reduces the external structure, using increasingly subtle prompts until the students can perform on their own.

Students who move easily through all the steps in a teaching sequence don't need the teacher's prompts for very long. After successfully using the procedures three or four times, these students can generally use them without assistance. On the other hand, students who are easily distracted, or who have not developed analytical strategies, need the teacher's assistance with the step-by-step models until they are ready for independent work. Neither group of students, however, should aimlessly guess at a story title.

Another important aspect of the strategy-teaching process is preemptive teaching. In figure 3 the student has just told the teacher that John really wants carrots with a lot of vitamins. The teacher then asks: "Is getting big carrots important? Sweet and tasty carrots? Cheap carrots?" These questions ensure that the student *maintains the correct focus* and doesn't get sidetracked by a lingering thought such as, "My mom always said to buy cheap food" or "I like sweet

things." This step is especially important for weak readers. Rather than let a student make an error and then deal with it, the steps in the teaching format try to *preempt* errors.

Story Grammar

One focus of recent reading research has been *story grammar*, a student's awareness of the components of typical narratives and the relationships among these components. Most people acquire the essentials of story grammar from reading and listening to stories. Singer and Donlan (1982) devised an instructional system for teaching story grammar to students with insufficient knowledge of the basic structure of fiction.

More recently, Carnine and Kinder (1985) attempted to merge Singer and Donlan's approach with explicit instruction. The subjects were 13 intermediate-level students with poor comprehension skills, most of whom were receiving remedial instruction in reading. All of these children could read the experimental passages with at least 95 percent word recognition accuracy, yet all scored lower than 60 percent on an experimenter-designed comprehension test. For instructional purposes, the Singer and Donlan framework was simplified to four questions.

1. Who is the story about?
2. What does he or she want to do?
3. What happens when he or she tries to do it?
4. What happens in the end?

Each 20–30 minute training session involved three stories. The teacher read the first story and asked the group the four questions. Then the teacher asked individual students in the group to read the second story aloud, asking each story grammar question when appropriate. She immediately corrected any student errors and then asked the students to summarize the story according to the story grammar questions. The students read the third story silently. The teacher told them to ask themselves each question as they read, answering the fourth question when they finished the story. Only when all students had completed the reading and the questions did the teacher ask the class a series of comprehension questions.

"The explicit strategies create a shared language between teachers and students, which teachers can use when correcting errors. Without this shared language many teachers simply don't know what to say . . . ."

Instruction, using a range of narrative stories from basal and remedial reading texts, lasted for ten days. Students received two short-answer comprehension tests based on two short passages; in addition, three independent judges taped and rated students' summaries of the stories. The team administered maintenance tests two and four weeks later to determine students' retention skills.

Presenting low-performing students with an understandable, systematic approach to narrative material led to significant increases in performance. The average student's performance increased from 53 to 75 percent. The fact that students maintained gains over a four-week period showed that they had integrated this approach into their reading.

Students seemed to internalize these four questions, using them to pinpoint what was important. The teaching sessions incorporated several key principles of our model: (1) teacher modeling of explicit strategies, (2) immediate correction of student errors, (3) gradual shift from teacher-directed activities to independent work, and—perhaps most important—(4) sustained, supervised work on the strategy until students demonstrate that they are using the strategy independently.

The Ability to Detect Faulty Arguments: An Example of Critical Reading

The third study was conducted with above-average ability students in the domain of critical reading and critical thinking (Patching et al. 1983). This study examined the effectiveness of systematically teaching students one aspect of critical reading—the detection of potentially faulty arguments. A review of some publications of the Institute for Propaganda Analysis (Smith 1974) helped us identify three categories of commonly used invalid arguments. We then developed an instructional procedure to teach students to identify these types of invalid arguments. Figure 4 is a sample teacher's guide for the lesson that trains students to detect what is often called "invalid testimonial."

First the guide stated a clear rule to help students recognize instances of invalid testimonial: "Just because someone important in one area says something is good or bad in another area, you can't be sure it's true" (step 1, fig. 4). Students practiced distinguishing between a person's being important or competent in one area and being an expert in all areas of knowledge. They practiced with a set of examples—comedians may not be experts on nutrition, and high school principals may not know everything about sex or emotion. As in the *rule-based inference* example discussed earlier, teachers used a detailed, step-by-step analysis during the early stages of instruction.

Unlike the other studies, students in this study were reading at or above grade level. Nonetheless, 39 percent of the 5th graders failed the screening test (i.e., were unable to detect invalid arguments more than 50 percent of the time). This is not so surprising when one realizes that advertisers and politicians commonly use invalid testimonials to confuse adults.

Students were randomly assigned to one of three groups: (1) direct instruction with an adult teacher, (2) workbook practice using the direct instruction teaching materials and exercises (with corrective feedback from an adult), or (3) a control group (workbook practice or general comprehension exercise). After only three days of teaching, the mean score for the direct instruction group was 90 percent; scores for the other two groups were both at 58 percent. The study shows that students with the greatest gains had the benefit of direct instruction and guided workbook practice as well as work with a teacher who modeled the steps, asked questions, and provided immediate feedback.

"If research can indicate which topics and skills seem to require concerted, active teaching in reading—as well as in other disciplines—teachers could allocate instructional time accordingly."

Fig. 4. Critical Reading: Sample Teaching Format

1. Teacher:	Listen. Here's a rule. Just because someone important in one area says something is good or bad in another area, you can't be sure that it's true.
2. Teacher:	When someone important in one area says something is good or bad in another area, can you be sure that it's true?
3. Student:	No.
4. Teacher:	No, just because someone important in one area says something is good or bad in another area you can't be sure that it's true.
5. Teacher:	OK, listen. Dr. Smith is a very good doctor, and everyone likes him. He tells people why they are sick and helps them get better quickly. One day I saw Dr. Smith at Ben's Hardware Store. I wanted to buy a lawnmower. Dr. Smith told me that I shouldn't buy a Victor mower because they are the worst around. Since he's a good doctor, he should know.
6. Teacher:	In what area is Dr. Smith important?
7. Student:	Being a doctor.
8. Teacher:	And what is Dr. Smith saying?
9. Student:	Victor mowers are the worst around.
10. Teacher:	So what is the other area that Dr. Smith is talking about?
11. Student:	Mowers.
12. Teacher:	Since we're learning to judge what people say, can you be sure what a doctor says about Victor mowers is true?
13. Student:	No.
14. Teacher:	Why not? (Or prompt with, "What can you say when someone important says something good or bad?")
15. Student:	You can't be sure it's true, and doctors may not know very much about mowers.

These three examples from recent research suggest how explicit strategies work and what level of detail is necessary for most students to acquire new learning. In addition, the majority of the studies cited in figure 5 support the use of direct instruction.

Effectiveness of the Approach

As recently as 1981, Resnick concluded her review of instructional psychology with this remark: "For the moment, cognitive instructional psychology is largely descriptive science, intent upon analyzing performance but not upon making strong suggestions for improving it" (1981b, p. 692). Pearson was more blunt in his summation, declaring that throughout the '70s "our knowledge about *teaching* reading comprehension advanced very little, if at all" (1982, p. 11).

An assumption underlying the design of our research agenda was that teachers need precise guidance in how to teach comprehension to low-performing students. Virtually all the strategies used in the research led to significant improvements in the targeted comprehension skill. A meta-analysis of the studies (White, Gersten, and Carnine 1983) revealed a mean

magnitude of effect of .97 standard deviation units, well above levels usually set for educational significance. The meta-analysis demonstrated significant effects for retention of the skills as well.

In their review of the research on strategy training, Belmont and Butterfield (1977) concluded, "Children can be trained to use effective strategies, but once trained, they frequently revert to their immature strategies when no longer explicitly constrained to play the instructor's program" (p. 465). In the studies presented here, the consistent effects on *maintenance measures administered one or two weeks after the intervention* suggest that students are still using strategies even though no one is present to monitor or remind them to use them.

Cases Where Intensive Instruction Was Not Necessary

Up to now, our implicit assumption has been that modeling an explicit, overt strategy leads to higher performance. However, our research has shown that this is not always the case. Sometimes providing extensive systematic practice on the skill (accompanied by corrective feedback) is as effective as teaching step-by-step strategies. It appears that for relatively simple comprehension skills—such as using context clues to learn the meaning of unfamiliar vocabulary words (Carnine, Kameenui, and Coyle 1984), or determining real (versus apparent) character motive in a story (Carnine et al. 1982)—teachers may not need to model or explain an overt process. By receiving extensive practice (with feedback), even low-achieving students appear to learn not to trust everything characters say, but to evaluate their motivation by their actions, as well.

In these studies, the amount of practice differs radically from the amount found in most conventional teaching (Durkin 1984). In the study teaching students to identify character motives, for example, students were given 14 practice examples spread over a three-day period. In a basal reader, that much practice on such a skill might be spread over three years.

In most studies, however, explicit step-by-step instruction by an adult was necessary. In the two studies discussed in detail—learning to analyze arguments (Patching et al. 1983) and learning to draw inferences to analyze arguments (Carnine et al. 1982)—students who received extensive practice on the skill performed no better than students who received no practice at all. For these fairly difficult abstract skills, the teacher's role may be to provide successful models, offer immediate feedback, and systematically correct errors. This observation could have significant implications for how teachers use their time during the reading lesson. If research can indicate which topics and skills seem to require concerted, active teaching in reading—as well as in other disciplines—teachers could allocate instructional time accordingly.

Strategies with Limited Utility

Even extensive practice and teacher feedback on purportedly critical comprehension skills do not necessarily ensure improvements in comprehension. For example, a large body of research on pronoun constructions (e.g., Bormuth et al. 1970) has suggested that confusion about the meaning of antecedent pronouns impairs students' comprehension. Yet, intensive training in how to identify pronoun antecedents in typical social studies passages did not enhance overall com-

Fig. 5. Research Conducted to Date on Direct Instruction in Reading Comprehension Strategies

General Comprehension
1. Story grammar (Carnine and Kinder 1985)
2. Study skills (Adams, Carnine, and Gersten 1982)
3. Reading for meaning: oral reading errors (Carnine 1984)

Inference
1. Critical reading (Patching et al. 1983)
2. Rule-based deductions (Carnine, Kameenui, and Woolfson 1982, Carnine and Gersten, Carnine, Kameenui, and Maggs 1982, Ross and Carnine 1982)
3. Logical deductions (Collins 1985)
4. Character motives (Carnine et al. 1982)

Specific Skills (Vocabulary, Syntactic)
1. Learning vocabulary from context (Carnine, Kameenui, and Coyle 1984)
2. Vocabulary drill (Kameenui, Carnine, and Freschi 1982)
3. Computer-assisted vocabulary instruction (Johnson, Carnine, and Gersten 1985)
4. Syntax—pronoun constructions, clauses, passive voice (Kameenui, Carnine, and Maggs 1980; Kameenui and Carnine 1982)
5. Anaphoric structures (Dommes, Gersten, and Carnine 1984)

Text Structure
1. Visual displays (Darch and Carnine in press)

Comprehension in the Content Areas
1. Mathematics word problems (Darch, Carnine, and Gersten 1984)
2. Legal concepts (Fielding, Kameenui, and Gersten 1983)
3. Science concepts (Darch and Gersten in press)

prehension skill (Dommes et al. 1984). Although systematic instruction improved students' ability to identify pronoun antecedents, this ability did not significantly enhance students' comprehension of passages containing pronoun antecedents. The lack of an effect for direct instruction on this pronoun subskill highlights the importance of the relationship between an intervention and its intended effect. Strategy teaching, if done well, might improve performance on a targeted behavior, but not on other seemingly related domains of behavior.

A major advantage of explicit step-by-step procedures is that they allow teachers to provide specific feedback to students when they make errors. The work of Duffy and Roehler indicates, though, that most teachers don't know how to correct comprehension "errors." Our own observations as part of a naturalistic study of reading in intermediate grades support this contention (Gersten and Carnine 1984).

The explicit strategies create a shared language between teachers and students, which teachers can use when correcting errors. Without this shared language many teachers simply don't know what to say (as the Duffy-Roehler audiotapes reveal); when students have difficulty with a comprehension item, teachers merely ask the child to think again, call on another student, or give the answer themselves.

"Rigidity" of Strategies

Some educators are concerned that teaching a step-by-step strategy will produce students who "think" in exactly the same way. An investigation of teaching study skills (Adams, Carnine, and Gersten 1982) demonstrated that many students personalized the study process by omitting one of the steps they had been taught. Others integrated the new procedure (which did not call for taking notes) with their own ideas of note-taking. Students who adapted the procedure were no less accurate. These observations demonstrate that only in the early stages of instruction need the strategy be explicit; thereafter, students will adapt and modify a strategy so that it works well for them. Providing their performance remains accurate, these adaptations are fine.

Drawing Explicit Maps for Learning

To know exactly which strategies to use, for which skills, and with which children requires more applied research as well as informal field-testing and discussion. Our research indicates that some skills may not be worth much investment of time because transfer effects are so weak. In most cases, however, explicit strategy instruction produces positive results. Furthermore, while some components of the explicit strategy model (such as providing extensive practice) have received a good deal of attention recently, other components (provision of detailed step-by-step models, fading of those models, and type of discrimination practice provided in the rule-based inference and legal concepts examples) have received scant attention.

The real power of teaching strategies comes when students can build broad mental maps that integrate a wide range of examples. Then students learn more than the particular lessons. They learn different ways of organizing and relating information. Thus the four "story grammar" questions become powerful to the extent that students can improve in their comprehension of a number of different stories.

This highly structured approach goes against the grain of what many educators feel comprehension instruction should be—an opportunity for students to spontaneously develop and articulate perceptions. Classroom observations, however, reveal that elementary (and probably middle school) teachers need guidance in teaching students to make sense of what they read. The research demonstrates that the type of questions, the detailed step-by-step breakdowns, and the extensive practice with a range of examples illustrated in our three studies will significantly benefit students' comprehension. The next step is integrating these procedures into reading series and into teacher training programs.

The quotation at the beginning of this article, from a poem by Charles Olson, was written soon after the destruction of Hiroshima and Nagasaki in World War II. When many poets and humanists attacked science, blaming it for nuclear destruction and the beginning of the arms race, Olson offered a different view. Refuting the superficial conflict between humanism and science, Olson concluded, "We can be precise."

Many of the dichotomies that have plagued education are equally superficial. The goal of precise instruction in comprehension strategies—no less than the goal of educational humanists—is for students to be capable of independent, intelligent analysis of writing. To accomplish this goal, we need only to build on what we know from research and technology about making our instruction more precise. □

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Russell Gersten and **Douglas Carnine** are both associate professors at the College of Education, University of Oregon, 1751-B Alder, Eugene, OR 97403–1215.

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JANET KIERSTEAD

How Teachers Manage Individual and Small-Group Work in Active Classrooms

They define teacher and student work cycles, sort students into attention categories by assessing their work daily, and provide assistance to students according to need.

Imagine a classroom setting where students are applying and extending basic skills and concepts by carrying out a variety of real-life activities that capture their interest and imagination. Individually and in groups, students are conducting opinion surveys, drafting lists of recommendations, writing announcements, compiling research data, sketching time lines, preparing for presentations, and so forth. They are engaged in what Bossert (1977) calls *multi-tasks*: individual or small-group projects in which students plan, select, and organize materials and activities.

In multi-task settings teachers are unable to control directly what each student is doing or even to see at a glance exactly what each is accomplishing. Here the teacher must know how to control students indirectly—to keep track of what they are doing, give help when it is most needed, and ensure that they are accomplishing what's expected of them.

The management of students in the multi-task setting, though complex, need not be overwhelming. Many successful teachers have already discovered how to direct students in such settings, and they have developed some basic processes, which others can adapt for use in any subject area and at any grade level.

A Three-Component Structured Environment

In the classrooms that I have studied, teachers allow the balance of control to shift to students during multi-task work periods by establishing, ahead of time, a three-component structured environment. One component is a curriculum of increasingly complex multi-tasks that defines *what* the students are to be working on (see Kierstead—1984a, 1984b, 1985—for a description of the multi-task curriculum). Another is the students' work cycle, a set of routines, procedures, rules, and consequences that spells out for students exactly what is expected of them: how they are to proceed and to account for the responsible use of their time (see fig. 1). The third component, the teachers' work cycle, is a set of routines and procedures that allows teachers to maximize the use of their own time in class: to automatically intercept students as they reach critical points in their work and to give them feedback and instruction when it is most needed (see fig. 2). Only after this three-component structure is well established are the students allowed to work independently.

Specific Features of the Work Cycles

Some features of the work cycles are particularly notable. For one, students assume responsibility for pacing themselves appropriately and for signaling the teacher when their work is ready to be checked. Consequences for failure to carry out such procedures are established ahead of time: usually loss of play time for younger students and loss of points tied to the grading system for older students. With the consequences clearly defined, teachers do not coax, nag, or even remind students of what they are expected to accomplish within a given time. Instead, to prompt students to work productively they rely on (1) students' inherent interest in what they are doing, (2) their tendency to do the "in" thing—to conform to the culture of the classroom that is established by routinely expecting students to behave responsibly, and (3) students' understanding that the teacher will carry out the established consequences.

Trusting students to act responsibly, teachers make little attempt to maintain constant surveillance over the entire group, which appears to set in motion a positive self-fulfilling cycle. First, students practice using their time productively, and, in classrooms where the structured environment is in place, they become remarkably responsible and independent. This frees the teacher to attend to students as the need arises in their work: to examine a student's line of reasoning, to question and probe to determine the source of difficulty, and to respond accordingly. As a result, work is closely matched to students' needs, strengths, and interests. Over time students become increasingly competent and independent, which in turn seems to heighten the teacher's original belief that they can be trusted. Increasingly confident that students can work productively on their own, the teacher spends less time watching over the entire group and more time giving feedback and instruction to individuals as they reach critical points in their work.

Another especially important feature is the fourth item in the student's work cycle—students are responsible for recording that work has been completed and approved by the teacher. Students seem to experience a gratifying sense of completion when they make the final mark, which signals that they are finished with their work. It's not unusual, for example, for a student who is checking off her name on the chart to remark with pride to someone passing by, "There, all done," or "Look, I'm finished." Further, when this record is kept on a class chart, it has the additional benefit of allowing the teacher to see at a glance how the class as a whole is proceeding.

Attention Categories

The teachers I observed sort students into attention categories by assessing

their work daily. Relying on the two automatic checkpoints—requiring students to have their work checked and approved during the work period and reviewing students' work away from the hectic pace of classroom activity—the teachers categorize student work according to primary, secondary, and minimum attention needs. For example, students whose work is in the *primary* attention category need immediate help or correction, or are ready to be introduced to a new skill. Students with *secondary* attention needs are those the teacher intends to keep an eye on because they have recently started something new, look as if they are about ready to move on to a new stage, or have a chronic problem. Students slated for *minimum* attention can continue to work independently, usually because they have recently been in the primary attention category and are comfortable with what they are doing.

The attention categories help teachers determine which students they will seek out during the next class period and how they will intervene. Throughout the class period teachers are, of course, responding to student requests for help, but they have a plan for using their own time when they enter the period. At the beginning, teachers spend most of their time initiating contact with the primary attention students, while keeping an eye on those in the secondary category. As the period progresses, they become alert for signs of difficulty or a readiness to begin something new.

Since sorting work according to need is a continuing process, students regularly circulate through all three categories, probably not remaining in the same one for more than a few days. The exception would be a student with serious chronic difficulty, who would seldom be in the minimum attention category.

Equal Consideration of Student Work and Attention According to Need

Underlying these processes is the teacher's decision to give equal *consideration* to student work and *attention according to need*. By requiring that each student have work checked and by routinely reviewing work outside of class, teachers ensure that they consider the needs of all their students. By forming attention categories based on this automatic daily assessment and intercepting students with primary needs during the next class period, teachers provide for attention according to need. Lacking this process, the teacher would be at the beck and call of the more assertive students. Given the rapid flow of events during the multi-task work period, some students would probably be overlooked.

In a misguided attempt to avoid overlooking any of their students, teachers who have not discovered how to form attention categories usually divide their attention equally among their students. They schedule regular meetings with small groups established far in advance, usually according to test scores or perceived ability. But *equal concern* for the needs of individual students does not call for equal attention. Scheduling group meetings to give them equal

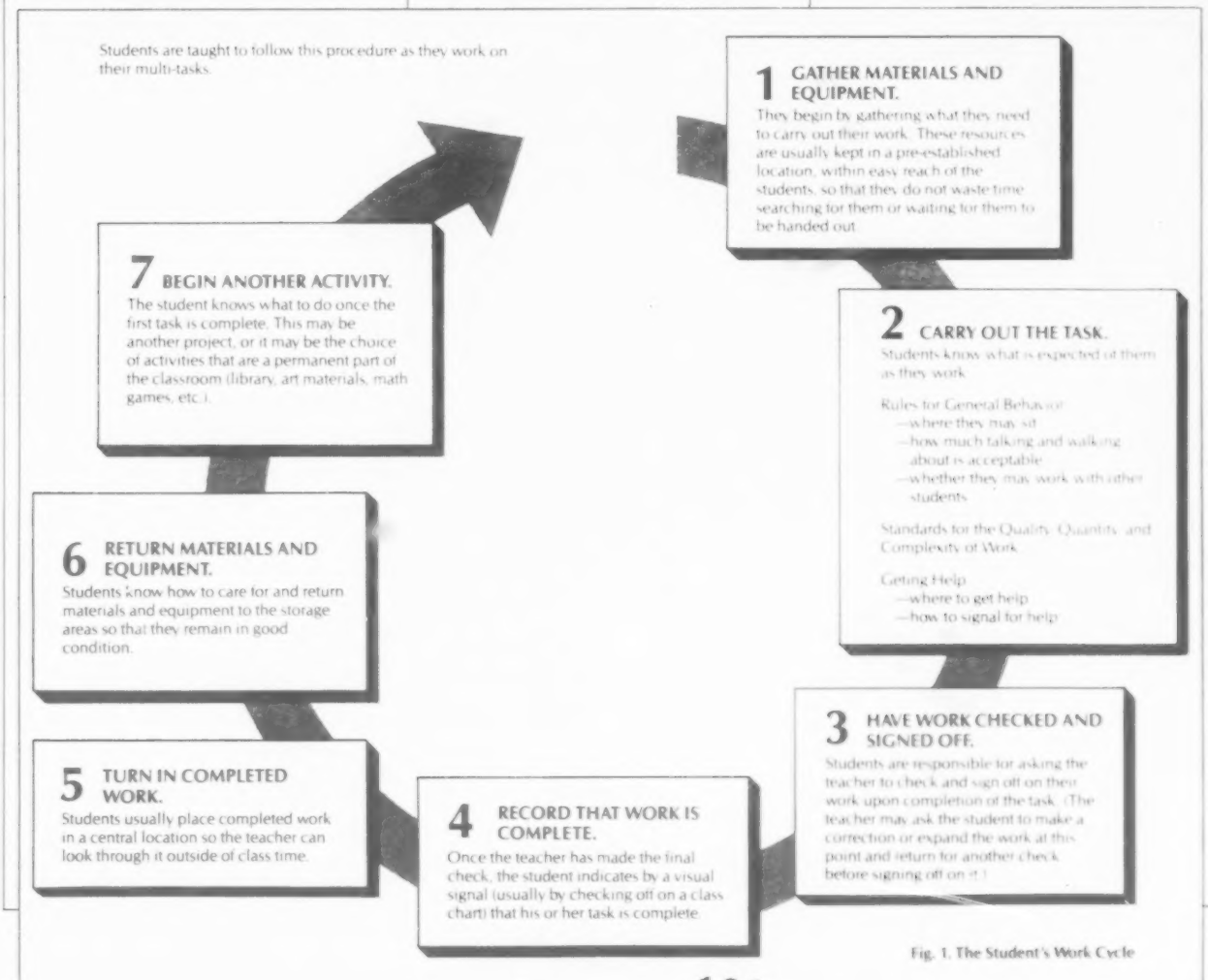

Students are taught to follow this procedure as they work on their multi-tasks.
1 GATHER MATERIALS AND EQUIPMENT.
They begin by gathering what they need to carry out their work. These resources are usually kept in a pre-established location, within easy reach of the students, so that they do not waste time searching for them or waiting for them to be handed out.
2 CARRY OUT THE TASK.
Students know what is expected of them as they work.
Rules for General Behavior
—where they may sit
—how much talking and walking about is acceptable
—whether they may work with other students
Standards for the Quality, Quantity, and Complexity of Work
Getting Help
—where to get help
—how to signal for help
3 HAVE WORK CHECKED AND SIGNED OFF.
Students are responsible for asking the teacher to check and sign off on their work upon completion of the task. (The teacher may ask the student to make a correction or expand the work at this point and return for another check before signing off on it.)
4 RECORD THAT WORK IS COMPLETE.
Once the teacher has made the final check, the student indicates by a visual signal (usually by checking off on a class chart) that his or her task is complete.
5 TURN IN COMPLETED WORK.
Students usually place completed work in a central location so the teacher can look through it outside of class time.
6 RETURN MATERIALS AND EQUIPMENT.
Students know how to care for and return materials and equipment to the storage areas so that they remain in good condition.
7 BEGIN ANOTHER ACTIVITY.
The student knows what to do once the first task is complete. This may be another project, or it may be the choice of activities that are a permanent part of the classroom (library, art materials, math games, etc.).

Fig. 1. The Student's Work Cycle

attention wastes valuable class time. Students' needs constantly fluctuate, differing in intensity in ways that cannot be foreseen. The same student, within the same day, will have some needs that are simple and quickly met and others that require more of the teacher's time. Moreover, particularly intense needs—reaching a developmental level of readiness for reading, coming to grips with a basic scientific or historical concept, and the like—will surface at different times during the year for different students. Giving students equal attention probably impedes their progress by unnecessarily taking them away from their work, and *necessarily* limits the teacher's time to respond fully to students when they are most in need of help.

Responsibility and Control Over Decision Making

Teachers need not choose between *either* the tight teacher control characteristic of traditional, large-group direct instruction *or* the abdication of teacher control often associated with experiential learning. If we intend to encourage our students to learn to work independently, to use their time productively, and to apply and extend their basic skills and concepts to real-life problem-solving situations, we must learn to share responsibility and control over decision making with them. To do so we must first recognize that control over decisions regarding the pace, sequence, and content of instruction exists on three levels: long-term goals, short-term goals, and minute-by-minute decisions. Figure 3 illustrates how the balance shifts between the three levels.

As shown, the teacher, as the agent of society, must determine the long-term goals, can share with students decisions regarding the short-term goals, and must allow students to make the minute-by-minute decisions needed to plan and carry out their projects. Before allowing students to assume control over decision making at the third level, however, teachers must accomplish two things: (1) provide enough instruction in the basic skills and concepts to prepare students to plan and carry out their projects; and (2) establish the three-component structured environment, which provides students with enough feedback and instruction *during* the work period to enable them to proceed, and makes them accountable for using their time responsibly.

Effects on Students

What are the effects of sharing contol over decision making with students? First, shared control allows students the latitude they need to practice using higher-level thinking skills.

Research on student motivation suggests a second powerful effect: a heightened willingness to use the skills being developed. Deci (1985) has found that rigid, controlling teacher behavior lessens students' intrinsic motivation and impairs their creative performance. He and his colleagues have found that children in the classrooms of control-oriented teachers show less intrinsic motivation, per-

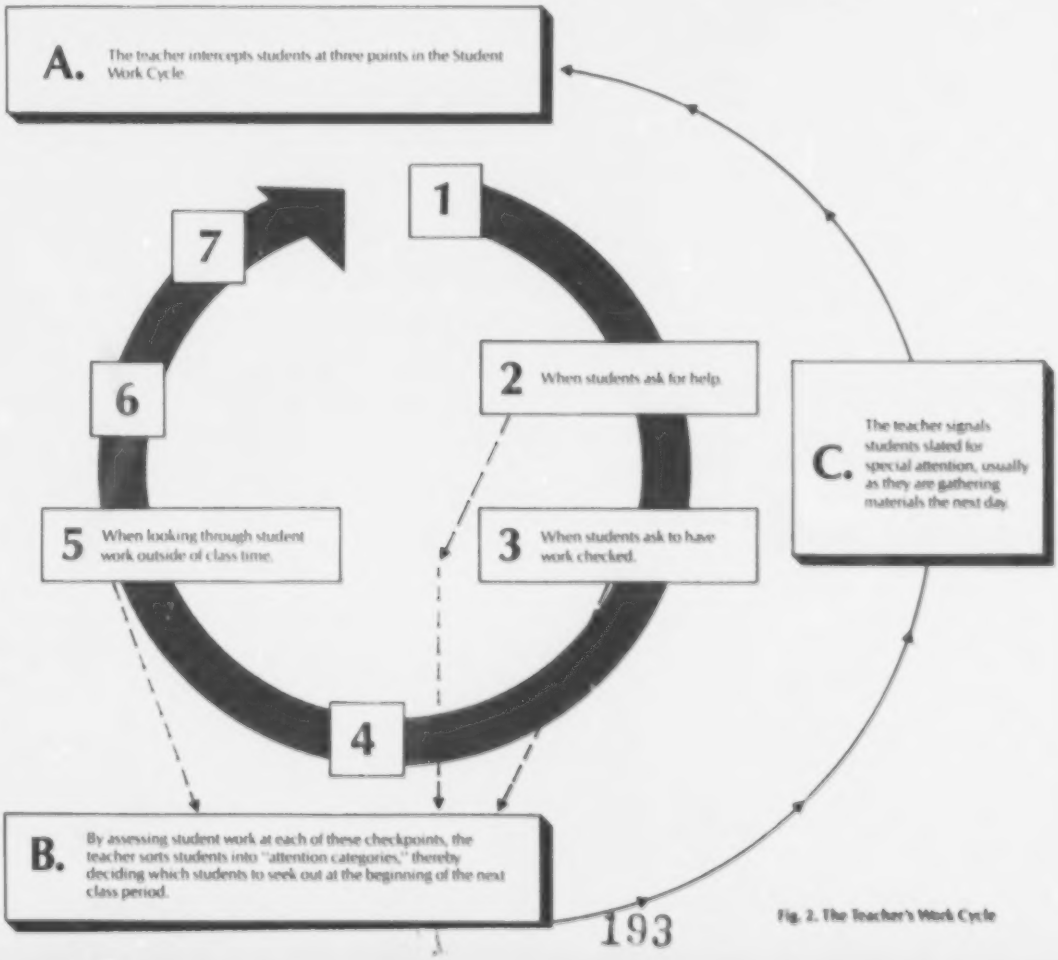
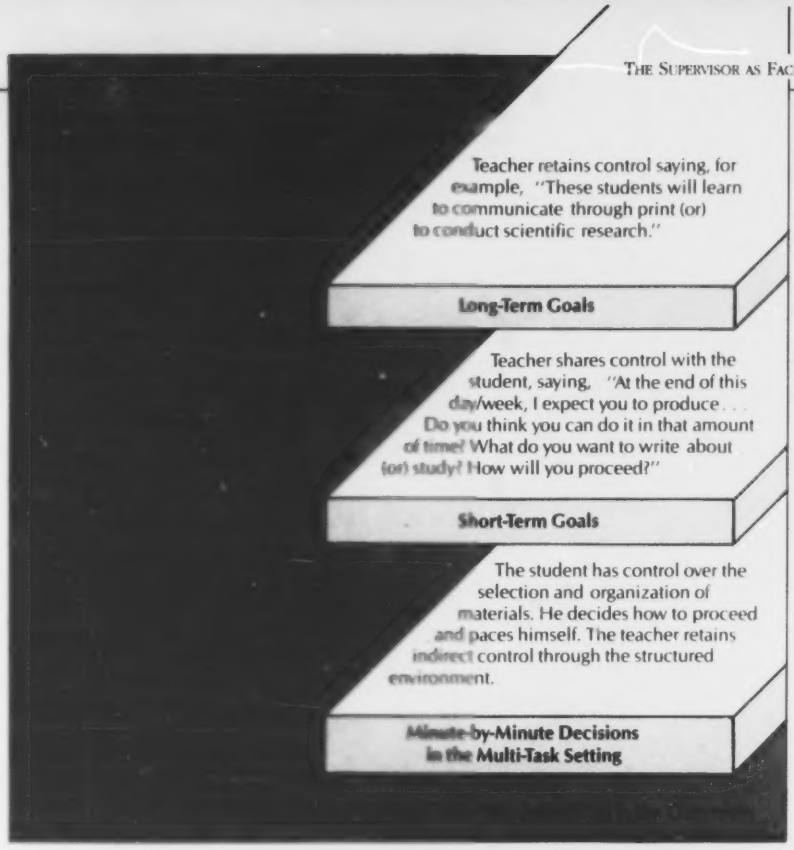

A. The teacher intercepts students at three points in the Student Work Cycle.
1
2 When students ask for help.
3 When students ask to have work checked.
4
5 When looking through student work outside of class time.
6
7
B. By assessing student work at each of these checkpoints, the teacher sorts students into "attention categories," thereby deciding which students to seek out at the beginning of the next class period.
C. The teacher signals students slated for special attention, usually as they are gathering materials the next day.

Fig. 2. The Teacher's Work Cycle


Teacher retains control saying, for example, "These students will learn to communicate through print (or) to conduct scientific research."
Long-Term Goals
Teacher shares control with the student, saying, "At the end of this day/week, I expect you to produce . . . Do you think you can do it in that amount of time? What do you want to write about (or) study? How will you proceed?"
Short-Term Goals
The student has control over the selection and organization of materials. He decides how to proceed and paces himself. The teacher retains indirect control through the structured environment.
Minute-by-Minute Decisions in the Multi-Task Setting

ceive themselves to be less competent, and hold lower feelings of self-worth than students in control classrooms.[1]

Looking at the long-term effects of sharing control with students, Maehr (1976) reaches a similar conclusion. He distinguishes between short-lived, on-task behaviors and *continuing motivation*—student willingness to continue working or take up a task in a different context when relatively free from external constraint, either at home or later in the class period. Maehr's analysis of literature on achievement motivation suggests that continuing motivation is promoted by the student's perception that he or she: (1) is somewhat autonomous, (2) is competent in performing tasks, and (3) is growing to become like others held in high regard.

Findings from my study of primary classrooms (Kierstead 1984a) tend to support Maehr's conclusions. I selected classrooms known to be unusually effective in promoting literacy skills and highly regarded beyond the boundaries of their own school for independence and motivation of students. In formal and informal interviews, students overwhelmingly expressed perceptions Maehr has associated with continuing motivation: (1) they were doing their work because they liked it and wanted to learn, and (2) their work was "closest to the best" in the class.

My experience in the field supports these findings. Indeed, one of the most common remarks I have heard over the years from parents, support personnel, and visitors in classrooms where students share in decision making and control within a structured environment is that students seem to be unusually inner-directed, working with a sense of purpose and a feeling of competence. This is in addition to their being highly interested in and willing to carry out their multi-tasks at home as well as in school.

A Word About the Future

The renewed interest in higher-level thinking skills is part of a movement from a narrow to a broader, more humanistic view of education. We seem to be reaching agreement that we want our students to acquire the basics, but we also want them to be willing and able to use their basic skills and concepts for real-life purposes.

A note of caution is in order, however. Historically in education, we have allowed the proverbial pendulum to swing from teaching students using traditional instructional methods to allowing students complete freedom. This time, as we move toward a more humanistic emphasis on developing higher-level thinking skills, creativity, independence, and an inner sense of responsibility, we must not let the pendulum swing too far.

Rather than abandon what has been learned during the back-to-basics era about making traditional methods more effective, we can achieve an appropriate balance by incorporating these methods within a wider range of management and organizational strategies.□

1. Deci (1985, p. 53) also reports, "In other research, we found that intrinsically motivated students displayed greater conceptual learning than extrinsically motivated students did, although both groups did equally well on rote memorization tasks."

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Janet Kierstead is a consultant in educational research and staff development, 1085 Galesmoore Ct., Westlake Village, CA 91361.

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Topic F

The Supervisor as Leader in Curriculum Development

SUPERVISORS IN THE VAST MAJORITY OF SCHOOL DISTRICTS HAVE a responsibility to ensure that the curriculum meets the needs of learners. Such supervisors view curriculum development as one of their three major tasks, the other two being improvement of instruction and staff development.

It is not unusual for the supervisor in a local school system to have the title of curriculum director. In some large districts, however, the responsibility for curriculum development activities, including the writing of curriculum materials, is separated from the responsibility for supervision of instruction. Some textbook writers urge that the tasks of curriculum development and improvement of instruction always be assigned to different persons.

At the district level and at the local school level, educational leaders are involved with teachers in making curriculum decisions and in bringing about curriculum change. The decisions made and the process by which change is brought about have major consequences for implementation.

If supervisors are to provide leadership in curriculum development, they need to be skilled in decision making, knowledgeable about current and historical curriculum developments, and effective as change agents. The articles in this section provide orientation to those ends and emphasize the current and historical aspects of curriculum development.

Tyler identifies "The Five Most Significant Curriculum Events in the Twentieth Century." Although he realizes that others might select different events, he believes there would be much agreement on the significance of at least one of the events he has identified: the "research and publication of the monumental work of Edward Thorndike." As Tyler discusses his choices, the reader sees a perceptive man who has been much more than a witness to these dramatic educational changes in the twentieth century—he has played a prominent part in them!

In "A New Look at an Old Idea: Core Curriculum," Goodlad reviews the concept of core curriculum "from definition to decline." Then he turns his attention to the current dialogue about school curriculum. "Whatever may have been wrong or excessive in the advocates' rhetoric for core curriculum during the 1940s and 1950s, their arguments are both on target and very much needed in addressing deficiencies in our schools today," he asserts. He calls for "*a complete rethinking of the domains of human experience and thought to be encountered commonly by children and youth.*" Supervisors charged with responsibility for curriculum development will want to consider carefully Goodlad's agenda for better schools in which he elaborates his conception of a common (core) curriculum.

In "Curriculum Development: Who Is Involved and How?", Martin, Saif, and Thiel report the findings from a "national survey of curriculum development practices in the United States." In addition to the report of the survey, the authors present their own model for promoting teacher involvement in curriculum development. The authors view teacher participation in curriculum development as important, and their survey reveals the "heavy involvement of teachers within curriculum committees" in school districts that develop curriculum locally.

George and Oldaker conducted a survey of 130 exemplary middle schools in an attempt to evaluate the effectiveness of middle school programs. In "A National Survey of Middle School Effectiveness," the authors report positive effects of changing to a middle school organization. They conclude that highly successful middle schools have very similar programs and that the programs tend to conform to the recommendations in the literature for middle level education in the last half century.

Natriello, McDill, and Pallas fear that the school reform movement, while directing attention to some problems, may divert attention from other equally pressing ones—such as the growing number of high school dropouts. In "School Reform and Potential Dropouts," they voice concern and suggest five responsibilities for school administrators who share their concern regarding the negative effects of current reforms.

"For the first time, we have the technology and methodology for a self-refining process of creating and implementing curriculum," claims Madian in "New Flexibility in Curriculum Development through Word Processing." He supports his claim with examples of two projects—one that provides a data base of personalized stories and another that helps to develop creative writing skills. Madian believes that "grasping the design, distribution, and publication capabilities inherent in applying computers

to education" is the key to changing the process of curriculum development and the materials developed.

As readers direct their attention to the articles, the following questions and activities may stimulate reaction and discussion.

1. Select one of Tyler's "five most significant curriculum events" for in-depth study. Discuss fully the origin of that event and assess the impact of that event on today's curriculum.

2. Review the curriculum documents used in your school district to determine to what extent they embody any of the ideas expressed by Goodlad. What changes would have to occur inside and outside the district to make possible the full implementation of Goodlad's core curriculum concept?

3. Interview the individual who has responsibility for leadership in curriculum development in your school district to determine if what is done locally is consistent with the model described by Martin, Saif, and Thiel. If you accept their model as an appropriate one, what steps would you take to implement it in your district?

4. Interview an instructional leader in a middle school to see to what extent that school conforms to the six characteristics found by George and Oldaker to be present in at least 90 percent of the exemplary middle schools they surveyed.

5. Do you and other leaders in your school district agree or disagree with Natriello, McDill, and Pallas as to the potential effects of school reform on the dropout rate? If you and others agree with the authors, what steps can you take to avoid the negative effects? If you do not agree, what evidence can you offer to refute their claims?

6. What do you see as the advantages and limitations of Madian's scheme for using word processing in curriculum development?

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RALPH W. TYLER

The Five Most Significant Curriculum Events in the Twentieth Century

Born in the work of Thorndike and Dewey, in the movement to professionalize curriculum making, and in the progressive experiments of the 1930s, modern curriculum development captured a new vision of student learning and transformed the purposes of schooling.

Photograph by Joe Di Dio

Writing of an event that linked his professional development to an educational watershed, Tyler said, "I was so impressed by the [1927] yearbook's emphasis on the need for professionals to reconstruct the curriculum that I resolved to make that my field of professional practice. . . . The yearbook provided the stimulus and guidance for a new professional, the curriculum specialist."

I first gave serious thought to which events in the field of curriculum development have been of most significance when I was asked to address this topic last June at ASCD's dedication ceremony for its new headquarters. I realize, of course, that there have been many significant events and that others could very likely select different events and have good reasons for their selection. But let us begin with something we can all surely agree on—the significance of the research and publication of the monumental work of Edward Thorndike in empirically refuting two long-accepted beliefs: that the study of the subjects of the school curriculum resulted in disciplining the mind, and that particular subjects developed particular faculties of the mind.

Curriculum Significance of Thorndike's Work

For many, many years curriculum discussions focused on the presumed educational values of different subjects and the place of each in the curriculum. The study of geometry was believed to develop the logical faculty of the mind; the study of Greek and Latin was believed to develop the verbal faculty. The study of any subject that was tightly organized and difficult to master was believed to discipline the mind to think cogently. Yet it was not until 1893, with the publication of the NEA's Report of the Committee of Ten, that science became widely accepted as a proper subject for the high school curriculum. It had been accepted in the college curriculum only 30 years earlier.

When Thorndike's studies demonstrated that students who completed courses in geometry were no better at solving logical problems than were students who had not taken geometry, and that students who completed courses in Latin were no better in their English composition than students who had not taken Latin, it was clear that the traditional justification for the subjects in the curriculum could no longer be accepted. Thorndike maintained that there must be identical elements in what was encountered outside of school in order for students to apply what they were taught. He referred to this as *transfer of training*.

The nature of curriculum construction was profoundly changed by Thorndike's work. His students and many others began to investigate the demands and opportunities in contemporary society for the application of school learning. For example, researchers started looking at the quantitative problems that adults encountered in particular communities in order to select arithmetic topics relevant to those problems. They also studied the kinds of reading and reading materials found in particular towns or cities in order to establish objectives for reading and the materials to be used in the reading curriculum.

Thus, Thorndike turned curriculum inquiry away from discussions of the relative values of different subjects to empirical studies of contemporary life in order to identify learning activities that could help students carry on more effectively in their own lives.

Dewey's Monograph on Interest and Effort

A second significant curriculum event was the publication in 1913 of John Dewey's monograph on interest and effort in education. The Dewey School at the University of Chicago was the forerunner of the Laboratory Schools of the university. In Dewey's school, learning activities largely involved group and individual projects. He reported that when students became interested in a project or lesson assignment, they put forth more effort and learned more than when the project or lesson was not interesting.

This generalization was a direct denial of the pedagogical dogma of the day. When I was in elementary school in Nebraska in the early 1900s, a guiding principle in the selection of curriculum content and learning experiences was that the material should be distasteful to students—not interesting but quite the opposite. The theory was that students really had to discipline themselves and work hard on topics they found unpleasant, while topics of interest would offer no challenge and require little effort. When Dewey's monograph was published, it caused great debate and was not widely accepted until more and more teachers reported that they had selected materials of interest to their students and found results similar to those reported by Dewey. When I began teaching in the Pierre, South Dakota, High School in 1921, I found the faculty nearly evenly divided between those who sought to identify interesting topics, activities, or illustrations in their courses and those who were firmly against such a practice. But by 1925 it was widely accepted that students' interests should be taken into account when formulating learning objectives and selecting experiences for the school curriculum.

The 26th Yearbook of the National Society for the Study of Education

The 1927 yearbook of the NSSE was published in two volumes: Part I, *Curriculum Making: Past and Present*, and Part II, *The Foundations of Curriculum Making*. It furnished the rationale and justification for establishing curriculum as an area of professional study and a field of professional practice. The Society devoted both Parts I and II to a review of the development of curriculum work in the schools of America and an analysis of curriculum development activities, progress, and problems. The members of the yearbook committee and the authors included almost all of the leaders in this rapidly growing field. There were progressives like Harold Rugg and essentialists like William Bagley. There were those busily engaged in constructing or revising curriculums and those whose contributions dealt with basic principles and criteria. All agreed that the prevailing curriculum in the elementary and secondary schools of the United States was not adequate or even appropriate to a democratic society in the modern world. It was time to develop a cadre of professionals who could work on the curriculum in the schools of every city and state in order to fulfill the American dream of an educational system that would help all young people to develop into responsible, productive, and happy citizens.

When the yearbook was presented in Dallas at the annual NEA meeting, it provoked much discussion not only by college and university professors but also among supervisors, principals, and superintendents. I was in my final year of graduate work at the University of Chicago. My professors—Judd, Charters, Bobbitt, and Gray—initiated in their classes discussions of the yearbook and its implications. My field of specialization was educational psychology and statistics and my dissertation supervisor was Charles Judd. However, I was employed part-time on the Commonwealth Teacher Training Study, a national project headed by W. W. Charters to improve the curriculum for preparing teachers. I was so impressed by the yearbook's emphasis on the need for professionals to reconstruct the curriculum that I resolved to make that my field of professional practice. The next two years, 1927–29, as a faculty member of the University of North Carolina, I had my chance; I spent three days a week working with teachers in their schools as they reviewed and rebuilt their curriculums. This yearbook provided the stimulus and the guidance for a new professional, the curriculum specialist.

The Society for Curriculum Study

In 1930, at the annual NEA meetings, 20 of us who considered ourselves students of curriculum spent two evenings talking about the projects in which we were engaged. I was then at the Ohio State University in the Bureau of Educational Research. W. W. Charters, Edgar Dale, and I were working with instructors of freshman and sophomore classes who were stimulated to re-examine their courses by the fact that more than half of the students dropped out of the university before they finished the sophomore year. Charters and I were also working with the faculty of a novel institution, the Rochester Athenaeum and Mechanics Institute, which had recently been reconstituted to furnish technical education for the children of artisans employed by the great technical firms of Rochester, such as Eastman Kodak, Bausch and Lomb Opticals, General Railway Signal, and Stromberg-Carlson Electrical Appliances. We were also working with the faculty of a liberal arts college—Muskingum College in New Concord, Ohio—on the improvement of curriculum and instruction.

Among members of the group that met on those two evenings in 1930

were Charters, Dale, Henry Harap, and Hollis Caswell. We found that our discussions of particular projects were not only informative and instructive but that they raised significant issues for reflection, study, and discussion. Believing that we should become a more formal group to provide for correspondence, newsletters, and face-to-face discussions, we formed the Society for Curriculum Study. Some years later, the division of the NEA called Directors and Supervisors of Instruction suggested a merger with the Society for Curriculum Study, which led to the formation of the Association for Supervision and Curriculum Development. The original group of 20 was the ancestor of this large and great organization.

The Curriculum Experiments of the 1930s

The Great Depression of the 1930s created serious educational problems and daring challenges for curriculum workers. Youths in large numbers, unable to find work, enrolled in high school; they had no other place to go. Most of the new students did not plan to go to college, and most of them found little meaning and interest in their high school tasks. Only a few were able to gain admission to the Smith-Hughes programs in vocational education, which were designed to prepare students for a number of occupations.

Recognizing this fact, many teachers and principals favored a move to reconstruct the general high school curriculum and instructional program in order to meet the needs of the Depression-Era students and to respond to pressures for greater opportunities for self-direction in learning. At the same time, however, they did not want to jeopardize any students' chances for college admission. This was their dilemma.

The Progressive Education Association took the lead in attacking the problem and was soon followed by some states and accrediting organizations. The Progressive Education Association developed the Eight Year Study in which 30 schools and school systems from Boston to Los Angeles demonstrated the effectiveness of curriculums designed by each school to meet the needs of its own students. The Michigan State Education department established a somewhat similar project, and the Southern Association of Colleges and Secondary Schools sponsored a similar demonstration in southern white institutions, while a pioneering group of southern Negro schools conducted their own experiments. In all of these projects, the schools were permitted and expected to develop educational programs that each believed appropriate for its students without regard to current college entrance requirements. Along with the curriculum developments, each school was expected to participate in a comprehensive program of evaluation.

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What resulted from this spate of curriculum projects? I can speak most knowledgeably about the Eight Year Study since I was director of the evaluation staff for the project. Perhaps most significant in terms of current practices in curriculum development was the widespread acceptance of the idea that schools could develop educational programs that would interest a large proportion of their students, help to meet some of the students' needs and, at the same time, provide students with the preparation essential for success in college. Because of that project, most state departments of education and most colleges and universities greatly reduced their specific requirements for the high school curriculum and relied more upon each school's taking responsibility—although recent trends have been in the opposite direction.

A second outcome of the study was the recognition by colleges and universities that they could find among high school graduates who had not met specific subject requirements many who would succeed in college work. They learned that they could select successful candidates for admission on the basis of their ability to read, write, solve quantitative problems, and show evidence of strong interest in further education. This led to the wider use of entrance examinations, such as the SAT, that did not test specific content but appraised general skills.

A third outcome was the development of the inservice workshop, which was invented during the project to furnish time and assistance to teachers in developing instructional programs and materials and in acquiring new knowledge and skills for their work. This device is now recognized as an effective means for the continuing education of professional personnel in many fields.

A fourth outcome was the wide acceptance of educational evaluation instead of testing. Previously the effects of educational programs or procedures, if appraised objectively, were judged by the pupil's performance on achievement tests, which commonly measured simple skills and the recall of information and reported results in a summarized single score. The Eight Year Study reminded educators that teachers usually seek several educational objectives in their conduct of a course. It also demonstrated that it was possible to appraise the progress of students toward each of these major objectives by using questionnaires, observations, and samples of products as well as tests. This became the common conception of evaluation.

Clearly, the experiments and demonstrations of the 1930s have profoundly influenced the curriculum and instructional activities of the Western world.□

Ralph W. Tyler, Director Emeritus, Center for Advanced Study in the Behavioral Sciences, Palo Alto, CA 94305, resides at 2233 Shiloh Ave., Milpitas, Ca 95035.

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JOHN I. GOODLAD © 1987 ASCD

A New Look at an Old Idea: Core Curriculum

The meaning of core curriculum has shifted with societal pressures and educational trends. It is time again for educators to affirm the American ideal of equal and excellent schooling by defining what is central to the education of all students.

Educators in the United States and Europe are taking a new look at the meaning of core curriculum, asking what shall be taught, to whom, and in what ways. The relevance and ubiquity of these questions were brought into focus at a recent international Seminar on Core Corriculum at Enschede, the Netherlands, in November 1985. The seminar was cosponsored by the National Institute for Curriculum Development (SLO) and the Association for Supervision and Curriculum Development.

Seminar participants expressed their concern about at least five sets of curriculum issues: (1) whether all students within a nation should experience a common curriculum; (2) whether they should experience a common whole or merely a core of the whole common to all; (3) whether there should be some common ending point where it is deemed unnecessary or undesirable to continue this core; (4) what offerings or experiences should constitute the common curriculum; (5) what characteristics of learners, schools, or society pose difficulties or obstacles to the common pursuit of a core curriculum.

These curriculum issues have become the subjects of hotly debated white papers, green papers, royal commission reports, and government mandates in virtually every country, province, or state represented at the seminar. Useful though this debate may be, it has at least two unfortunate consequences. First, because debate at this macro level almost necessarily produces or results in a document, curriculum tends to be thought of as a document. Second, because government-produced or -commissioned documents often carry with them official policies and directives, curriculum dialogue tends to be aborted at micro levels in the ecology of schooling. That is, at micro levels dialogue concentrates more on interpretation and implementation than on underlying philosophy and rationale. A kind of withering of the debate occurs among educators. They become, if you will, intellectual eunuchs.

Clearly, with respect to the meaning of *core* as applied to curriculum, an historical hiatus has occurred: the curricular lexicon of educators has been overwhelmed by popular usage of *core* to describe a portion of the curriculum, usually those courses prescribed for all. The fact that *core* can convey somewhat more subtle and complex pedagogical and curricular connotations seems to be unknown or forgotten.

Intellectual Boundaries of Curriculum Debate

Before turning to the recent history of the concept of core, some further comment on the dialogue about curriculum generally is in order. Once upon a time, before some observers declared the curriculum field to be moribund, being in it and of it was great fun, probably because no one assumed there were limits to the scope of the dialogue. Participants in the debate believed passionately that both they as professionals and the debate made a difference. I wonder if we hold today as passionately to these beliefs. Or, becoming cynical for a moment, I wonder if curriculum workers of that earlier era were romantics, and that we are now more realistic, wisely framing the boundaries of debate by what is left to us after the "political process of fixation of the core" (curriculum), as Jozefzoon and Gorter (1985, p. 15) distinguish it, is over. After all, behavioristic thought in Western societies has directed the attention of curriculum workers (and others) to the pseudo-scientific process of reducing to objectives the goals presumably set by policymakers and has turned their attention away from moral questions regarding the nature, aims, and functions of education. There is

all too little room for questioning the motives and assumptions of those who politically dominate the process of curriculum engineering currently being passed off as curriculum development.[1]

Although I am willing to distinguish between a political process of curricular specification and a development process taking place in schools and classrooms, I am not willing to view the former as impervious to educators. Nor am I willing to view curriculum development as merely a process of derivation and interpretation. My conceptualization of curriculum-making in a democracy is that it functions as a system open at all levels, with the necessary transactions and interpretations flowing from the micro to the macro level as well as the reverse (Goodlad 1979).

My position is not, I believe, romantic. There is today a relatively large corps of well-educated (not necessarily much-schooled) adults for whom education in schools means much more than drill in basic skills and mere preparation for the work force. They want it all (Boyer 1983, Goodlad 1984). "All" includes those processes of inquiry that assure individual growth and critical preparation as a citizen. The rigorous and persistent cultivation of the inquiring mind in schools assures us that, in the long run if not the short, schools will indeed shape the social order. And so, we must do everything in our power to legitimate in the political process of curriculum fixation a core not just of subjects but of modes of inquiry, and to foster such processes in our schools and classrooms. This means, in part, that educators must both contribute to the process of fixation and assume that what is sent down to them is not "fixed."

Core Curriculum: From Definition to Decline

In the United States—and, I assume, many other countries—the words *core curriculum* carried no significance until about a half-century ago. Placed in front of *curriculum,* the word *core* would have been a redundant adjective. The curriculum students encountered in schools was the whole and the core simultaneously. The use of *core* in the curriculum dialectic coincides chronologically with rapid expansion of secondary school enrollment and therefore varies from country to country.

In the United States, the secondary enrollments expanded from nearly 7 percent of the age group in 1889 to about 15 percent in 1909. Until near the end of this period of modest expansion, most of the students constituted the source of the cohort for the tertiary or postsecondary period. There was relatively little disagreement over the curriculum offered: the classics, Greek and Latin composition, rhetoric, natural philosophy, French, ancient history, astronomy, and trigonometry. But this curriculum was soon to give way to what the *Boston Globe* defined in 1907 as "the training of ordinary boys and girls to do the ordinary work of life. . . ." (Lukas 1985). In the three decades from 1909 to 1939, secondary enrollment increased so as to constitute 73 percent of that age group. The Great Depression, beginning in 1929, brought large numbers of young people into secondary schools who had not planned to be there and who had no plans for continuing into higher education. The compulsory school-leaving age was moved up to 16 in most states: there were no slots in the workplace for 14-year-olds and few for 16-year-olds. Although the core curriculum of secondary education was remarkably resistant to change at the outset of this enrollment onslaught, it was only a matter of time until it first yielded and then virtually collapsed.[2]

There is no doubt that the erosion of the core curriculum—from the entire curriculum to an increasingly smaller nucleus of core courses necessary to meet university admissions requirements, which also were eroding—was precipitated not just by a student body that was increasing in size and diversity but also by a unique combination of ideology and changing circumstances in the workplace. It was difficult to interest students in a curriculum designed to prepare them for where they did not intend to go.

Introduction to a trade, however, on school time and at no cost to the individual, provided youths with a leg

"The curricular lexicon of educators has been overwhelmed by popular usage of *core* to describe a portion of the curriculum, usually in the form of courses prescribed for all. The fact that *core* can convey somewhat more subtle and complex pedagogical and curricular connotations seems to be unknown or forgotten."

"Disciples of the progressive theorists have left us a troublesome legacy because of their excesses, but the leading theorists, at least, probably had a better grasp of their time in history than today's advocates of 'back to the basics' have of theirs."

up while they were biding their time before seeking employment. The progressive education ideas of the time—stemming from educational philosophy and psychology and having to do with learning by doing, intrinsic motivation, felt needs, and the like—fit nicely with the argument that schools must prepare for jobs, citizenship, parenthood, and leisure, not just for more academic learning.[3] The accompanying conversion of grammar and composition to language arts, history and geography to social studies, and the separate sciences to general science, has been both well documented and deplored (Ravitch 1983 and 1985). With these changes in the organization of the traditional subjects came substantial infusion of vocational education, a field whose leaders neatly combined practicality and progressive ideology in their language of justification (and who, incidentally, lobbied in federal and state capitols with astonishing success).

Because of changes in student populations, economic realities, ideology, and entrepreneuring educators acting in coalition with responsive groups in the community, the established array of courses constituting the common curriculum of secondary students had been badly mauled. Although the ideal of a common core of learning experiences still survived, what emerged in concept and recommended practice was a far cry from the traditional core of subjects.

Defining the Heart of Curriculum

The English word *core* is derived from a Latin word meaning *heart*. The core is ". . . the heart, the thing from which life emanates, the part of the body that spreads life-giving nourishment to the whole body" (Butterweck 1946). To many curriculum workers a core meant something that transcended subject lines to reach the needs of the individual person—an idea fed by many psychological beliefs of the time. To others, however, core meant practice in the democratic principles that were believed to be at the heart of individual freedom—an idea fed by presumably successful revolutionary and philosophical beliefs, especially with respect to tyranny and the ideal social order.

We see the emergence of these strands of thought in selected excerpts from the curriculum literature from 1938 to 1956.

> The emphasis upon the development of a unified program of studies . . . has resulted in the organizing of a common core of experiences drawing content from all the major areas of human living, a curriculum which disregards subject matter lines and which is generally required of all pupils a substantial part of each day (Brown 1938, p. 210).

> The core curriculum, then, is made up of those educational experiences which are thought to be important for each citizen in our democracy. Students and teachers do not consider subject matter to be important in itself. It becomes meaningful only as it helps the group to solve the problems which have been selected for study (MacConnell et al. 1939, p. 25).

> A core represents the sum total of personal youth problems and the problems of social significance encountered by youth. It exists without relation to subject lines and is organized around problems (Smith 1945, p. 164).

> A true core curriculum attacks the problems common to all youth. It is a functional approach to harmonizing the concerns of youth, on the one hand, with the demands of society, on the other, without unduly emphasizing one or neglecting the other (Burnett 1951, p. 97).

> The core curriculum may be regarded as those learning experiences which are fundamental for all learners because they are drawn from their common individual and social needs as competent citizens of a democratic community (Kessler 1956, p. 43).

These statements differ so markedly in concept from what is so widely discussed today as *core* that they seem to be of another era. In a very real sense, they are. The first powerful indicator for some people in the United States that there was a shortfall in school quality came during and following World War II, when tests revealed high incidences of illiteracy and near-illiteracy among recruits. However, many people passed off low test scores as characteristic of those with little schooling. Then, a series of highly critical books (four in 1953) brought to public attention the presumed excesses of progressive education. With the launching of Sputnik in 1957, many people in the United States, including many

educators, were ready for something other than the kind of core curriculum many theorists had been recommending. What they probably longed for but did not perceive themselves getting was a return to good, old-fashioned subject matter. Then, what they heard regarding curriculum reform in the 1960s was a return to subject matter, all right, but in new dress—new mathematics, new physics, new biology—fashioned out of John Dewey (on inquiry), Piaget (on developmental stages of learning), and some concepts regarding the structure of the subject disciplines (Bruner 1960). Return to a core of basic subjects taught as subjects was to be postponed—to provide, among other events, grist for the 1980s' educational reform dialogue.

As a nostalgic footnote on the core curriculum movement that died in the 1950s, I quote from a 1961 paper.

> Today, in many school systems, the term *core* is used in reference to a block of time. That is, it refers to that period of the curriculum which uses two or three class periods with the same teachers and students for two or more subject areas (Taylor 1961, p. 99).

And so, a concept intended not to corrupt the curriculum but to make it more accessible (closer to the heart) and more useful (for work, play, family life, and citizenship) was reduced to an organizational arrangement.[4]

I have devoted what may appear to be disproportionate attention to a concept of core curriculum that has virtually disappeared from practice and discourse (and which was missing in the papers prepared for the Enschede seminar). My reason for doing so has been to show that the effort to apply progressive theories to the curriculum was not intended to corrupt or weaken it but to render it accessible to increasingly diverse student populations—to humanize it, if you will. Unless we become more knowledgeable about such efforts in our history, we are doomed to repeat the mistakes of the past during a coming era of educational reform likely to be quite unlike the present one. Our general failure to recognize what the future portends is exacerbated by the mountains of commission reports and official documents obscuring what lies ahead—documents that look largely backward for old solutions to both old but seemingly intractable problems and new ones arising out of changing demographic, economic, and technological realities. Disciples of the progressive theorists have left us a troublesome legacy because of their excesses, but the leading theorists, at least, probably had a better grasp of their time in history than today's advocates of "back to the basics" have of theirs.

It is fair to say, I think, that in the current dialogue about school curriculum the words *core* and *common* are used interchangeably, if *core* is employed at all. Yet, if the two are to be used as synonyms, *common* must be enriched by inclusions that go beyond specification of content: connections of the subjects taught with the universe they supposedly represent, preparation through the curriculum to participate broadly in the human conversation, classroom encounters with issues and problems that transcend subject divisions, modes of learning that involve students as participants rather than mere observers, and equal access to the whole for all students. Whatever may have been wrong or excessive in the advocates' rhetoric for core curriculum during the 1940s and 1950s, their arguments are both on target and very much needed in addressing deficiencies in our schools today.

An Agenda for Better Schools

If the findings and conclusions of the several major inquiries into schooling (Boyer 1983, Goodlad 1984, and Sizer 1984) are reasonably valid, then a major agenda emerges for improving schooling in the United States.

First, there must be a complete rethinking of the domains of human experience and thought to be encountered commonly by children and youth as they progress through school toward effective, satisfying lives as citizens, parents, workers, and thoughtful participants in their culture. Simply to prescribe so many courses in mathematics, English, and the like for graduation from high school and admission to college is to shirk this responsibility. The essential domains of human experience and thought embrace much more than the array of subjects conventionally allotted to the curriculum. Indeed, we would be well served by transcending these rubrics to get a holistic picture of the universe into which students should inquire and about which they should become conversant.

To be active participants in their culture, human beings must be aware and have a reasonable understanding of the worldwide systems driving it: physical, biological, social, political, communicative, evaluative, and economic (Boulding 1985). Schools are assigned almost exclusively the unique responsibility for developing in students what Kerr (1987) refers to as the "canons of assessment." Through these, students acquire not just an awareness of these systems but the tools for inquiring into and conversing about them. In effect, they become participants in the great human conversation.

These canons of assessment are embedded in the subject fields, properly organized in the curriculum for human accessibility. Core curriculum theorists and advocates were committed to the task of making them accessible through curriculum planning at the school and classroom level. This required a two-way linking of what was to be taught: to the students' interests and capabilities, on one hand, and to the world's systems, especially democracy, represented in and by the subject fields, on the other. Effective linking often—indeed, usually—necessitated the selection of organizing centers for learning that cut across several domains of subject matter. Figure 1 attempts to represent this linking visually. At the center is the student, reaching out to understand the culture through the curriculum of the school.

This kind of analysis quickly reveals that determining a common core of the same subjects, let alone topics, for all students is a futile pursuit. On the other hand, it reveals the possibilities for assuring that all students have significant encounters in all, not just some, domains and in this sense that they experience a common curriculum. Data from A Study of Schooling

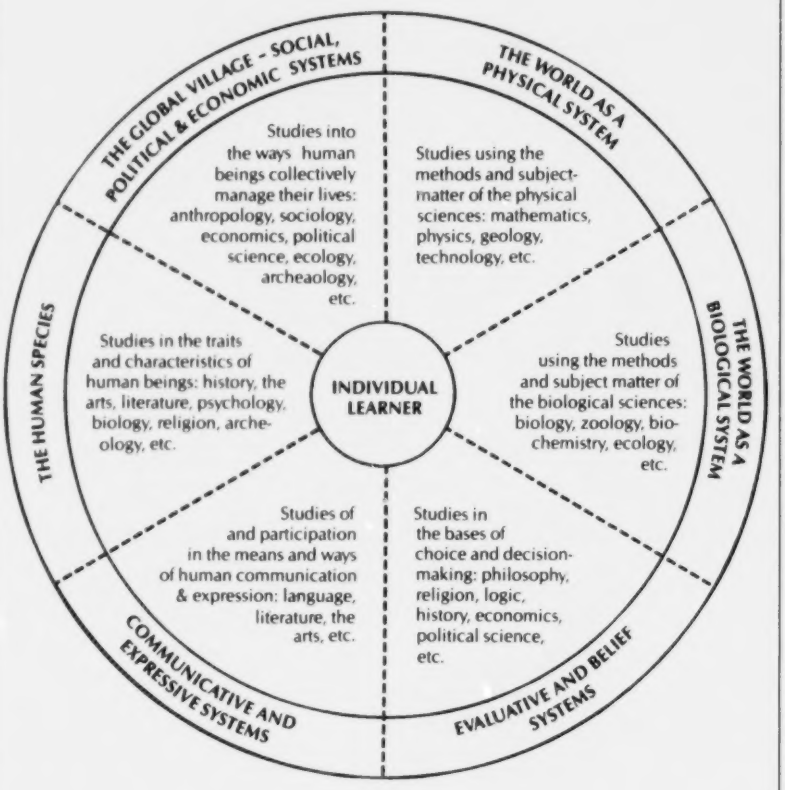
THE GLOBAL VILLAGE - SOCIAL, POLITICAL & ECONOMIC SYSTEMS
THE WORLD AS A PHYSICAL SYSTEM
THE WORLD AS A BIOLOGICAL SYSTEM
COMMUNICATIVE AND EXPRESSIVE SYSTEMS
EVALUATIVE AND BELIEF SYSTEMS
THE HUMAN SPECIES
Studies into the ways human beings collectively manage their lives: anthropology, sociology, economics, political science, ecology, archeaology, etc.
Studies using the methods and subject-matter of the physical sciences: mathematics, physics, geology, technology, etc.
Studies in the traits and characteristics of human beings: history, the arts, literature, psychology, biology, religion, archeology, etc.
INDIVIDUAL LEARNER
Studies using the methods and subject matter of the biological sciences: biology, zoology, biochemistry, ecology, etc.
Studies of and participation in the means and ways of human communication & expression: language, literature, the arts, etc.
Studies in the bases of choice and decision-making: philosophy, religion, logic, history, economics, political science, etc.

Fig. 1. The World's Systems and the Scope of School-Based Curricula for Expanding Students' Views of Their World. (Adapted from Kenneth E. Boulding, *The World as a Total System*, Beverly Hills, CA: Sage, 1985.)

(Goodlad 1984) make clear that what secondary school students take as curriculum in school is rarely guided by some kind of overarching conceptual framework (a curriculum document, if you will) that defines the domains and both the comprehensiveness and the balance that each student's curricular encounters should reflect. Interest in this work is increasing among school people, but the serious efforts required are, at best, in an embryonic stage.

Second, each state must determine with and for its citizens the length of the school program deemed necessary (and feasible) to ensure the tools and understandings required for active, constructive participation in the culture. In the United States at the turn of the century, the assumption was that such an education was provided in a common elementary school. Today, the implicit assumption is that attendance through secondary school is required.

There are those who argue that this is an unrealistic assumption, the result in the United States of an excess of hope that cannot be fulfilled in a single comprehensive high school. I would be forced to agree if I could accept the somewhat cynical conclusion that fundamental curricular and pedagogical change in our schools is not possible, and if I believed that the reforms now being legislated in most states in the U.S. are both the ones we need and the only ones feasible. But I don't agree with either of these propositions.

Consequently, I do not believe that our hope is misplaced and that we cannot provide in a newly defined common school the curriculum deemed necessary and, therefore, to be commonly encountered (Goodlad 1985). Further, I believe that the course (to return to the classic meaning of curriculum) can be run by most students in 12 years, beginning at age 4 and concluding at age 16. The challenge is in defining and teaching the proper core.

In my book, *A Place Called School* (1984), where I have deliberately and reluctantly defined the core rubrics in conventional terms, I allow for both encounters beyond a common curriculum and time for some students to stay longer with the core. And then I propose that a minimum of 10 percent to a maximum of 20 percent of the total curriculum be reserved exclusively for the development of individual talent—for all students, not just the academically gifted.

I shall not enter here into a defense of a 4-4-4 structure of schooling, beginning at age 4 and concluding at age 16 (the common minimum leaving age in the United States), or into the full range of arguments for shortening the total time now occupied by the K-12 school system (age 5 to 18). A large chunk of the time saved is to be achieved by excluding during these years vocational training and redefining a vocational education component for all. While I believe in the value of gardening, working with

wood and metal, repairing machines, and a host of other hands-on activities as vehicles for *general* education, I agree with Peters (1966, p. 27) that the end sought is not the vocational preparation of gardeners, or carpenters, or metal workers, or electricians. By cutting out of secondary schools those sequences of vocational preparatory courses now dominating the curriculum of large numbers of students, I would create part of the room required for the comprehensive body of common learnings deemed necessary for all. A completely rethought domain of vocational *education* would be included in this common curriculum.

Three major conditions pertaining to the changing workplace support my argument. First, it simply is no longer feasible for secondary schools to provide training that even reasonably represents the range and complexity of work for which high school graduates might now aspire. Second, studies increasingly are revealing a marked closing of the gap between education deemed necessary to prepare for higher education, on one hand, and the workplace, on the other (National Academy of Sciences 1984). And, third, there is growing evidence to show that students trained in a vocation at an early age very frequently do not enter the arena for which they were prepared. In my scheme of school reconstruction, the years immediately following graduation (at age 16) would be devoted to vocational preparation, community and national service, and a host of other endeavors often recommended for the 16- to 20-year-old group but seldom implemented—largely because the institutions controlling current options do not willingly give up any of their turf.

Third, there must be an extraordinary broadening in the pedagogical techniques employed to assure productive encounters in the curricular domains. This may well be the most difficult "must" to implement. Our data showed the steady drop in pedagogical variety as students progressed upward through the grades—from an average of five modes in the primary years to only two in the secondary grades. The steady diet of lecturing, telling, and questioning the whole class, monitoring seatwork, and administering quizzes took up some 88 percent of all instructional time (just over 70 percent of all class time) in the high school classes we studied (Sirotnik 1983). It takes a considerable stretch of the imagination to conclude that some students, because of or in spite of this type of instruction, will get even a little practice with all the modes of learning that might reasonably be defined as part of the common, essential core referred to earlier.

Teachers teach the way they were taught, it appears, rather faithfully imitating the models they observed in their own teachers over many years of schooling—models that must serve teachers rather well or they would abandon them. Teacher education programs apparently are not sufficiently deep and deviant to cause teachers to transcend the conventional wisdom. We will not get better teachers, I fear, until we have a sufficient number of exemplary sites for all to observe and experience, firsthand and hands-on, during their preparation programs. This condition calls for the kind of close working relationships between schools and universities that may exist in some countries but is rare in the United States. Indeed, the major graduate schools of education often regard the small teacher education programs they offer as unwanted orphans. Studying teachers is regarded as more prestigious than educating them (Judge 1982).

It appears that the most immediately practical and practicable avenues for enlarging teachers' repertoire of pedagogical skills lie at the school and classroom levels. Policy directives from the macro level, however, can specify that a range of students' learning modes are to be cultivated, promote the expectation that a correspondingly comprehensive array of pedagogical procedures will be employed, and assure the financial resources necessary to a nation's investment in effective schooling.

Fourth, the conditions and circumstances of schooling must assure equal access to the common curriculum and whatever options are deemed desirable, and equity in regard to the efforts made by each school to assure

"By cutting out of secondary schools those sequences of vocational preparatory courses now dominating the curriculum of large numbers of students, I would create part of the room required for the comprehensive body of common learnings deemed necessary for all."

"There is in the culture of this and other countries the belief that people fall naturally into one of two categories—those who can learn and should work with their heads and those who can learn and should work with their hands. Schools generally favor those thought to be in the former category. . . ."

individual progress. Our data show extraordinary inequities regarding both availability of the curricular domains and the distribution of opportunities to learn in schools. I shall pass over those that result simply from the apparent differences in the ability of schools to conduct their business efficiently in order to concentrate on those practices that appear clearly to be based on inappropriate educational assumptions, at best, or prejudicial biases, at worst.

There is in the culture of this and other countries the belief that people fall naturally into one of two categories—those who can learn and should work with their heads, and those who can learn and should work with their hands. Schools generally favor those thought to be in the former category and offer little encouragement and few rewards to the latter who, at the intermediate and upper ends of schooling, frequently find themselves in programs deliberately designed to prepare them for vocations not considered to require much academic ability. Often, these are pushout programs that get rid of "hands-oriented" students, whose early departure from school enhances a school's average test scores. Or, in many countries, they are guided early into vocational schools that, together with academic schools, create separate streams of students heading for quite different careers. Our data show that a disproportionate number of students from low socioeconomic backgrounds and who, in turn, are disproportionately from racial minorities, are enrolled in that part of the curriculum designed to prepare for specific jobs.

A more subtle differentiation of opportunities to encounter a common body of desired learnings exists in the academic offerings of the schools we studied. In most junior and senior high schools, subjects such as English, mathematics, science, and social studies were divided into three tracks of students—high, medium, and low. Those of us who advocated provisions for individual differences during the 1960s had in mind pedagogical and organizational arrangements such as provision for more time, differing grouping patterns, varied teaching procedures, and the like. We did not consider the possibility that some educators would take advantage of the concept of individualized instruction by differentiating the content of the curriculum and restricting for some students opportunities to learn.

What we found in our studies were gross track-to-track differences in the content offered, the enthusiasm of teachers, the extent to which teachers helped students to learn, the ambience of the classroom, and teachers' expectations, all findings favoring the upper tracks (Oakes 1985). Once again, we found that students from low-income families, disproportionately minority students in the school population, were overrepresented in the lower tracks.

Given the extraordinary problems of dealing with individual differences in comprehensive secondary schools, governmental efforts to promote a

"The more we exhort rhetorically the ideal of a common curriculum for all students up to the time of entry into the work force and autonomous functioning as citizens and parents, the more we tempt educators to use arrangements such as tracking 'to organize away' the difficult problems of dealing with student variability."

common curriculum equally accessible to all students are likely often to be thwarted at school and classroom levels. The more we exhort rhetorically the ideal of a common curriculum for all students up to the time of entry into the work force and autonomous functioning as citizens and parents, the more we tempt educators to use arrangements such as tracking "to organize away" the difficult problems of dealing with student variability. It is exceedingly difficult to justify the educational practices accompanying tracking that we found to be so prejudicial to the less academically able students—many of whom appear to have been denied, early in school, opportunities to learn by and be rewarded for a more hands-on and less abstract orientation to learning.

Defining a core curriculum of models and domains to be encountered commonly by all students is not easy. But implementing it creatively, with equality and equity for all students, is as demanding a human task as can be imagined.

Educational Ethics and Excellence

I close with a few brief comments on excellence, the most popular and overused educational catchword of our time. It is not possible, some people believe, to have a universal core curriculum through the secondary school and excellence, too (Clark 1985a, b). Clearly, the larger the core and the more it is extended upward in a common school, the greater the misgivings regarding excellence, and the greater the fear that this core will be watered down for all.

Husén (1983) concludes that it is possible to have universal secondary schooling and excellence, but the cost in economic terms is high. The cost of restricting secondary education and graduating only a small number of students deemed excellent also is high, he points out. He warns that the latter restriction practiced widely will increase the gap between the "haves" and the "have-nots," creating a great worldwide underbelly of poorly educated, underemployed people.

But confining the dialogue about quality to the merits of universal versus selective schooling sidesteps the issues with which I began: those of what kind of core curriculum is necessary for all students, how much of the whole it is to constitute, and for how long it is to be commonly extended. Hodgkinson (1982), in arguing the merits of seeking universal secondary schooling and excellence simultaneously, points out that 75 percent of the age group in the United States graduates from high school, and that academic performance of the top 5 percent of this cohort compares favorably with that of top students in countries with comparatively low enrollments.

What he does not mention, however, is that there are gross differences in the curriculums encountered by students in the high school grades. Endeavoring to push more toward an academic curriculum defined as basic courses—the current direction of state reform enactments in the United States—could result in pushing more students out of school, increasing practices such as tracking in order to water down the curriculum for some, or both. And, to their dismay, those in the lower tracks who succeed in entering college soon learn that they were short-changed in access to knowledge while in high school.

Increasingly, the expectations of schooling in most countries are broad and call for much more than academic outcomes. Nearly all of the papers prepared for the Enschede seminar referred to academic, citizenship, vocational, and personal goals for schools and pointed to the need for a core curriculum to assure common learnings in these areas. Running through them, it appears, was the assumption that we cannot afford for our future adult citizens to have been branched early into two kinds of education, whether in common or separate schools—a fear that was expressed very early in the expansion of secondary education in the United States (Counts 1922).

To define a core curriculum as constituting *x* number of courses in mathematics and *y* number of courses in the native tongue is to sidestep and dangerously postpone the curricular and pedagogical issues that we must address. Among the most challenging

"At the very heart of our professional responsibility is how to assure for all of our primary and secondary students common encounters with the most significant domains of human experience."

of these, at the very heart of our professional responsibility, is how to assure for all of our primary and secondary students common encounters with the most significant domains of human experience. The ideal of common outcomes is chimeric, but the conditions of equal opportunity are necessary and obtainable.□

1. Decades ago, W. W. Charters developed a concept and accompanying technique of curriculum engineering designed to be useful for implementing the ideals of any prevailing political or governmental ideology. See W. W. Charters, *Curriculum Construction* (New York: Macmillan, 1924).

2. As late as the second half of the 1950s, there were high schools throughout the U.S. offering little more than a college preparatory curriculum to a student body from which as few as 5 percent would go on to higher education.

3. I am in substantial agreement with Kliebard regarding his comment that the ideas attributed to progressive education contained much that was vacuous and contradictory. (See Herbert M. Kliebard, *The Struggle for the American Curriculum 1893-1958* [Boston: Routledge and Kegan Paul, 1986], xi.) Nonetheless, leading thinkers in the movement, such as William H. Kilpatrick, and especially a few innovators in laboratory schools across the nation, expounded on and were identified with a view of education that went far beyond passive, rote learning in a few academic subjects.

4. One must raise the question as to the degree the foregoing conceptions of core curriculum were translated into school and classroom practices. No reliable data appear to be available. At a conference of professors of curriculum in the late 1950s, this question was asked of Nelson Bossing, an ardent advocate and chronicler of this core curriculum movement. He responded that only junior high schools had implemented anything close to the full array of key concepts for at least a significant part of the curriculum and that, at the movement's peak, perhaps 10 percent of the junior high schools in the country met these criteria. It is fair to say, however, that large numbers of secondary school educators (both junior and senior high) were exposed to and influenced by the progressive ideas on which these core curriculum practices were based.

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John I. Goodlad is Professor of Policy, Governance, and Administration, and Director of The Center for Educational Renewal, College of Education, University of Washington, Seattle, WA 98195.

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DAVID S. MARTIN, PHILIP S. SAIF, AND LINDA THIEL

Curriculum Development: Who Is Involved and How?

Photograph by Charles Skoup

Most respondents to a national survey agreed that teachers should be involved in curriculum development to ensure "teacher ownership" of curriculum and continuity between development and implementation. Here, a skilled teacher works on a new program for hearing-impaired children developed by teachers at the Kendall Demonstration Elementary School, Gallaudet University.

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A national survey shows that most school districts prefer homegrown curriculums developed by committees of teachers and administrators. Local control, however, requires long-term teacher participation that budget-watching school boards may be unwilling to pay for.

The call for excellence in education for the 1980s raises numerous questions for the professional educator. For the curriculum specialist, a special set of questions arises.

- What curriculum changes are needed at the district level?
- Who at the district level should make decisions about curriculum development?
- Who should be actively involved in curriculum development?
- What are the advantages and disadvantages of having teachers participate in curriculum development?
- What roles should administrators and parents play in curriculum development?

To answer these and other questions, we conducted a national survey of curriculum development practices in the United States.

Curriculum Development Process Model

An assessment of the curriculum development practices of today's school districts is especially useful when some model exists with which to compare them. Our model for maximizing teacher involvement in curriculum development requires a gradual implementation over a two- to three-year period. It involves ten steps.

1. A teacher committee meets to write a rationale and objectives for the curriculum; members then solicit feedback from peer teachers in their schools.

2. The committee revises the rationale and objectives based on this feedback and proceeds to develop student activities. Subcommittees may take responsibility for different groups of activities and then critique each other's work.

3. Subcommittees recommend materials and evaluation methods. The entire committee again solicits feedback from peer teachers on these products.

4. Committee members identify and briefly train pilot teachers who agree to test the curriculum and provide feedback based on implementation.

5. A new teacher committee is formed (with some members from the previous committee) to collect and evaluate the pilot-test data.

6. This second committee revises the curriculum based on pilot-test results.

7. The revision is brought forward to the administration and school board for final adoption.

8. The pilot teachers become a core group of trainers of other teachers who will implement the curriculum. (Preferably, there is one pilot teacher from each of several schools, so this training can be decentralized.)

9. A third committee may be formed (again composed of some members from either of the two previous committees) to carry out final revisions based on the year-long pilot test and to monitor the implementation itself.

10. Higher-level training, using the pilot teachers as catalysts, is conducted for teachers who are experienced in the new program to keep the curriculum vital.

This process is continuous, taking up to three years, and involves a large percentage of the teachers who will be expected to use the developed curriculum. This model was built on the work of Miel (1946), Pritzkau (1959), and others, who established the case for a slow but deliberate process of

locally based curriculum development designed to strengthen teacher commitment to implementing change.

The Survey

To help us answer the fundamental question, "To what extent is such a high level of curriculum development really carried out in American public schools?" we developed, administered, and analyzed a survey of curriculum directors or administrators in public school systems. The 12-item instrument (see fig. 1) surveyed processes used at the local school district level for curriculum development or revision. Items were based on current practice and focused specifically on the level of involvement of various personnel.

All questionnaires were coded for ethnic composition of the school system, size of the school system according to the number of students enrolled, dollars spent per pupil, and type of school system (urban, suburban, or rural) for each recipient selected at random. Table 1 provides a profile of the characteristics of the responding districts. The survey was sent to 200 districts of which 91 responded. Responses for each survey item were tabulated across the total group. A content analysis of narrative sections, particularly those relating to the local curriculum development process, was carried out. We also examined the fit between responses and our own curriculum development model.

The Results

The completed survey provides a picture of curriculum development in American public schools today.

1. *Curriculum master plan.* More than two-thirds of the districts reported having a master plan for curriculum development. In 60 percent of these districts, the plan was initiated by an assistant superintendent. Less frequently, it was guided by a director of curriculum or instruction.

2. *Areas of curriculum development.* All respondents except one indicated that they had been involved in developing curriculum. These districts reported that approximately six curriculum areas had been developed or revised during the past five years. We found no relationship between the size of the school district and the number of curriculum fields that were developed.

The major subject areas—language arts, mathematics, science, and social studies—were the most frequently developed or revised. The actual subjects and courses listed by the respondents were classified as shown in Table 2,

Number of students in your school system:_____
Your position title: _____

1. Some school districts try to have a 3- to 5-year plan for curriculum revision in their district.
   a. Do you have such a master plan for curriculum development?
      _____ yes _____ no
   b. If yes: What is the title of the person under whose leadership it was developed?
      _____
   c. In your district, have you been involved in developing curriculum?
      _____ yes _____ no

2. How many curriculum subject areas, if any, were developed or revised during the past 5 years? _____
   Please specify which ones:

3. *Briefly* list the steps you normally take in your district for developing curriculum:

4. To what degree did each of the following constituencies participate in the curriculum development process? Please circle only one in each line:

	Not at all	Very little input	Some input	Heavily involved	Not applicable
Community Representative(s)	0	1	2	3	N/A
Board of Education	0	1	2	3	N/A
Superintendent	0	1	2	3	N/A
Assistant Superintendent	0	1	2	3	N/A
Director of Curriculum	0	1	2	3	N/A
Principals	0	1	2	3	N/A
Assistant Principals	0	1	2	3	N/A
Heads of departments	0	1	2	3	N/A
Supervisors	0	1	2	3	N/A
Teachers	0	1	2	3	N/A
Teacher Aides	0	1	2	3	N/A
Parents	0	1	2	3	N/A
Students	0	1	2	3	N/A
Consultant(s)	0	1	2	3	N/A
Other: _____ (Please specify)	0	1	2	3	N/A

5. From your experience, who *should* be involved in the curriculum development process? (You may check as many as apply):

   _____ Administrators
   _____ Supervisors
   _____ Teachers
   _____ Students
   _____ Board of Education
   _____ Parents
   _____ Community representatives
   _____ College professors
   _____ Independent consultants

6. Please rank the following items on their effectiveness for changing curriculum. 5 represents the highest rank; 1 represents the lowest.

   _____ Buy a curriculum from a commercial company.
   _____ Ask a college professor of curriculum to do it.
   _____ Hire a consultant.
   _____ Use a curriculum that was tried in another school district.
   _____ Do it yourself.

Fig. 1. Gallaudet University Curriculum Development Process Survey

using the 1981 Classification of Instructional Programs developed by the National Center for Education Statistics.

Uniformly high effort was directed at developing or revising language arts and mathematics curriculums by school districts of all sizes. The larger the district, however, the more often the science curriculum was revised. Fifty-six percent of the small districts worked on the science curriculum, compared to 64 percent of medium-sized districts and 73 percent of large districts. Conversely, smaller districts most often cited low-incidence subjects, which we grouped into the "other subjects" category. Sixty-one percent of small districts worked on "other" curriculum fields, compared to 49 percent of medium-sized districts and 35 percent of large districts.

3. *The curriculum development process.* We asked the districts to describe how their schools developed curriculum. The most frequently mentioned activities included:

- assessing needs, including involvement of teachers through some type of survey (52 percent);
- allocating resources, including the establishment of curriculum committees (68 percent);
- establishing a scope and sequence (48 percent);

7. Based upon your experience, do you favor using committees in curriculum development?

_____ yes _____ no

If yes, what is the ideal number of members on a curriculum committee: ___ ___
Composition of committee (e.g., teachers, parents) _____

If no, what is your rationale? Please check as many as apply:
_____ Committees do not produce what is intended.
_____ Committees tend to be a waste of time.
_____ People involved do not have the expertise or adequate background.
_____ A committee is difficult to manage.
_____ Other: _____

8. Which of the following do you favor?

_____ A national curriculum
_____ A local curriculum
_____ A state curriculum
_____ Other: _____ (please specify)

9. Whose responsibility is it to ensure that a new curriculum is *implemented* after it is developed?

_____ The school principal
_____ The teacher
_____ The director of curriculum
_____ Other(s) _____ (please specify)

10. From your experience, how do you know that a curriculum is being properly implemented? *Briefly* state your opinion.

11. Some school districts favor a quantitative or statistical evaluation of curriculum, while others favor qualitative, descriptive evaluations.

Briefly, where do you stand in regard to this issue?

12. General comments about effective curriculum development processes:

Check One:

_____ I would appreciate a summary of the survey results; my name and address

_____ I am not interested in receiving a copy of the survey results.

"We have no evidence of a decline in the use of textbooks, but commercial curriculums apparently are not used as the foundation for curriculums developed locally."

- evaluating curriculum (43 percent); and
- obtaining administrative approval (35 percent).

It is troubling but not surprising that few of the districts reported using prior empirical research to shape the curriculum being developed (27 percent). In addition, few districts took the time to write a philosophy (18 percent) or to pilot the new curriculum (12 percent).

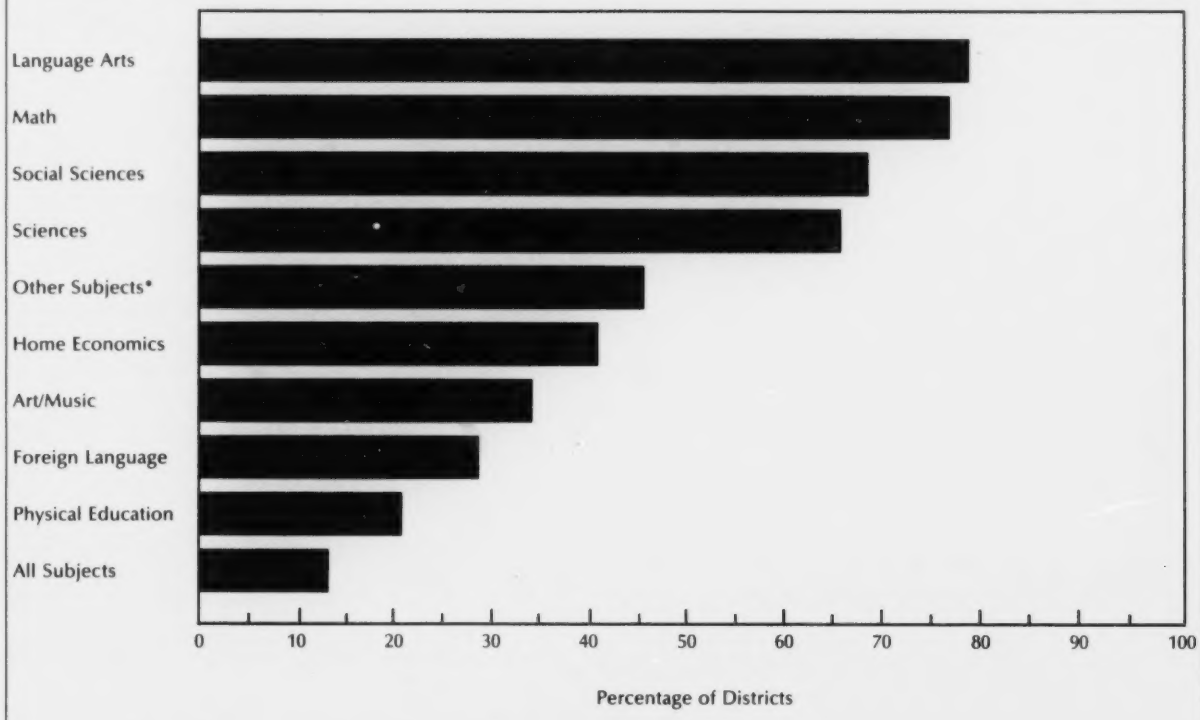
Table 1
Characteristics of Survey

Sample	200 school districts
Returned surveys	91 school districts
District size	30 percent—6,000+ students 50 percent—4,000 to 6,000 students 20 percent—less than 4,000 students
District location	45 percent—suburban 40 percent—rural 15 percent—urban
Average minority population	16 percent

4. *Constituency participation in curriculum development.* We asked the districts to indicate the degree to which different constituencies actually participated in curriculum development. In a follow-up question, we asked them to indicate which constituencies should be involved. The responses to these paired questions provided a way of comparing curriculum specialists' theories with practice.

Table 3 shows the average degree to which each constituency was involved in curriculum development. Heavy involvement was reported for instructional professionals and directors of curriculum. Assistant superintendents and principals also had a great deal of involvement. Community-based constituencies, especially parents, had less input. Students, on the average, had little input, and teacher aides almost none.

Table 2
Percentage of School Districts Reporting Development or Revision of Curriculum Areas over the Past Five Years



*Includes career education, study skills, media, business, typing, computers, vocational, driver education, humanities, psychology, industrial and practical arts.

Table 3
Degree of Participation in Curriculum Development by Major Constituencies

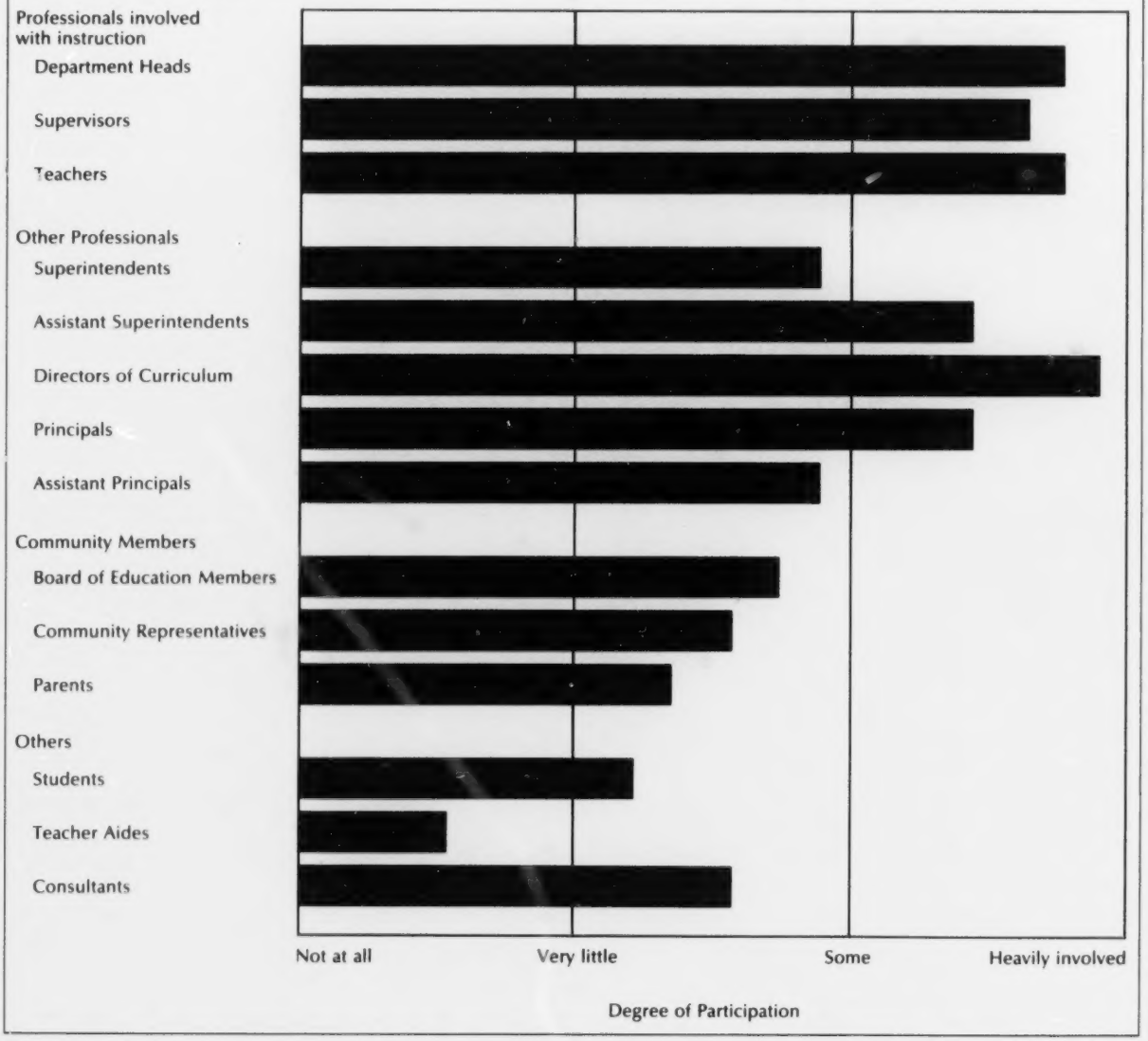


Table 4
Average Rankings of Effectiveness of Modes of Curriculum Change

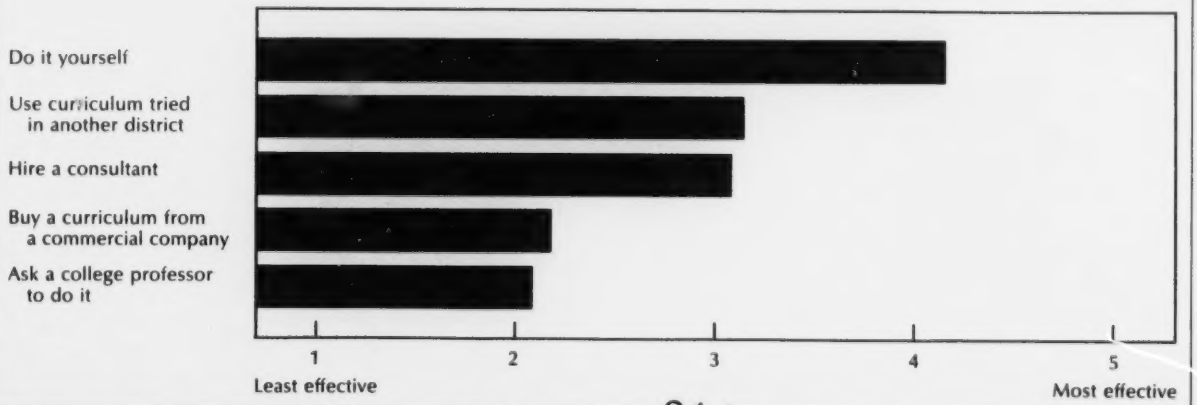


Table 3 also indicates that at least two-thirds of the respondents thought that administrators, supervisors, teachers, students, the board of education, parents, and community representatives should be involved in curriculum development. About half thought that independent consultants should be involved, and about one-third that college professors should participate. While there appears to be support for some degree of involvement by a wide range of constituencies, the degree of involvement supported by administrators remains undetermined.

All constituencies—teachers, students, parents, community representatives, and boards of education—showed higher rates of participation in districts that supported such involvement. Respondents' rather high support for parent involvement may be attributed to their need to obtain community support for curriculum revision and requires further study.

The universal involvement of teachers in curriculum development is significant, although the survey does not reveal the actual quality of their involvement. We found no relationship between the extent of teacher involvement in curriculum development and the size of the school system, the type of educational setting, the percentage of minority students, or dollars spent per student.

5. *Preferred strategies for curriculum change.* We asked the districts to rank the effectiveness of five different ways of bringing about curriculum change. Table 4 indicates that the highest mean ranking (4.2 out of a possible 5.0) was assigned to "do it yourself." "Use a curriculum that was tried in another school district" and "hire a consultant" were ranked moderately high as effective change strategies (3.2 and 3.1, respectively). "Buy a curriculum from a commercial company" was ranked relatively low (2.3), as was "ask a college professor of curriculum to do it" (2.1). However, these last two responses indicate that a large minority of respondents do favor curriculum adoption using the work of some outside agency.

Respondents were asked if they favored national, state, or local curriculums (we asked about national curriculum to find out whether the respondents favored development of a national curriculum, although none exists now); 84 percent chose local. This choice is consistent with "do it yourself" as the favored strategy for effecting curriculum change. Nearly 25 percent of the respondents favored a state curriculum, but only 1 percent favored a national curriculum.

Curriculum Development at The Center for Learning

TAP, Teachers/Authors/Publishers, is a 15-year-old network of master teachers and professional writers who team up at annual workshops to create high-quality curriculum materials. TAP publications are used widely throughout the United States, Canada, and Australia.

TAP is sponsored by The Center for Learning, a nonprofit corporation funded largely by grants, donations, and sales. Providing fellowships and secretarial and editorial assistance, the Center brings together approximately 40 teacher-authors each summer at John Carroll University in Cleveland, Ohio. TAP's primary goal is to enable practicing teachers to become published authors of exemplary curriculums that overcome textbook limitations and enable teachers to become more effective. The Center's board of directors is ecumenical, and the TAP materials are appropriate for public as well as private schools.

The Center's philosophy, integral both to the process and product, is that a classroom cannot be a values vacuum. The TAP teacher-authors endorse this philosophy and express specific values throughout the five published series. These values reflect the diversity of the United States, and the Center network exemplifies that unity amid diversity is not only possible but made stronger when universals are probed respectfully.

The TAP language arts curriculum for grades 9–12 comprises 25 units, including, for instance, Experiencing Shakespeare I and II; Speech; American Literature I and II, English, and World Literature; Tools of Nonfiction; and Advanced Placement Composition. Social studies for junior high include two units in U.S. History for grade eight and one Geography/World Cultures unit for grade seven. High school social studies include from two to four units each of Advanced Placement U.S. History, Economics, U.S. Government, U.S. History, and World History.

The Center is currently involved in a two-year project to develop basic skills units. Aided by grants from the Cleveland Foundation and the George Gund Foundation, the Center is piloting the units and an inservice program in 20 Cleveland public schools. To be refined by the TAP teacher-authors, these materials are scheduled for publication in 1988.[1]

Plans for the future include additional units, cyclical revisions of all series, and inservice programs. Last fall the Center started a Social Studies Newsletter, which is being followed this autumn by an English Newsletter.

Through these formal means of communication and participation in the annual workshops, TAP teachers are able to use their own knowledge and experiences to create a grass-roots organization that is dedicated to the development of exemplary curriculum materials.□

1. Materials that are written for use in all schools, public and private, are distributed by W. C. Brown Publishers, 2460 Kerper Blvd., Dubuque, IA 52001 (phone: 1-800-922-7696). Other materials, written specifically for Catholic schools and parishes, are available directly from the Center for Learning.

—By Rose Schaffer, H. M., Executive Director, The Center for Learning, 20770 Hilliard Rd., Rocky River, OH 44116.

What Franklin Bobbitt Might Say If He Could Only See Us Now

To all you stalwart schoolmen
And the factories you run;
To all you frazzled teachers and
The "frills" you've learned to shun;

To the planners and researchers
And their scientistic schemes:
Congratulations! Thank you! You've
Surpassed my wildest dreams!

I applaud your test-tube language
And your number-covered forms,
Your units of performance, your
Standards, and your norms.

I celebrate your objectives, so
Behavioral, so complete.
I love the way your test results
Make knowledge look so neat.

Distar? Workbooks? M.B.O.?
I never had such tools.
I dared not hope technology
Could so control the schools.

I like those curriculum engineers:
Bereiter, Mager, and Popham,
With "Back to the Basics" and ETS.
There's not much left to stop 'em.

Your direct instruction, contracts,
And curriculum in carts;
Your labels and your tracking,
Your Apple data charts—

It's all shown me how much I lacked,
How much I didn't know.
How I could've used it all,
Those many years ago.

You've scientized the whole shebang!
Efficiency? You employ it.
Just one thing still bothers me:
Why don't the kids enjoy it?

Richard Larson is Professor, Department of Curriculum and Instruction, University of Wisconsin–Milwaukee, P. O. Box 413, Milwaukee, WI 53201.

All 91 responding districts favored curriculum development by committee. The average preferred committee size, 10 persons, was not related significantly to the size of the district. Nearly all of the respondents favored teacher membership on these committees, more than three-fourths favored participation by administrators, and half favored parental involvement.

The low average rate of actual parent involvement in curriculum development contrasts with apparent general support for parent participation, particularly on curriculum committees. Parents had little input into the curriculum process in 88 percent of the districts.

Of those districts that believed parents should participate, more than half reported that parents were either heavily involved or had some input. (The survey inquired about the degree of parent involvement but not the actual nature of their participation.) Findings suggest that significant parental involvement in curriculum development exists only where it is actively supported by the schools, and further that the nature and degree of this participation varies from district to district

We found significant involvement of the school principal, although not as high as that of teachers. Recent literature in the field of curriculum change (e.g., Berman and McLaughlin 1978) indicates that building-level commitment by principals has been a key to successful institutionalization of program change; results of our survey appear to confirm this research.

6. *Curriculum implementation*. We asked the districts to tell us whose responsibility it was to ensure that a new curriculum was implemented. Nearly all respondents (89 percent) agreed the primary responsibility rested with the principal. However, about half of the respondents indicated that teachers and directors of curriculum had responsibility for implementation. This point should stimulate school districts to reexamine the potential of combined leadership in curriculum development.

We also found that, statistically, the higher the frequency of teacher involvement in implementation, the higher the frequency of curriculum director involvement. However, no significant relationship was found between principals' and teachers' responsibilities. From these findings we can hypothesize two patterns of implementation: one at the building level guided by principals, and one at the district level possibly coordinated by a director of curriculum.

With an open-ended question, we asked the districts to indicate how they could tell if a curriculum is being properly implemented. More than 70 percent reported that they relied on classroom observations by supervisors or principals, a view consistent with the perception that principals are largely responsible for curriculum implementation. Forty percent said they relied on standardized test results; nearly 30 percent reported using meetings or teacher lesson plans to judge success of implementation. Most districts relied on more than one method.

7. *Curriculum evaluation*. We asked the districts whether they favored qualitative (descriptive) or quantitative (statistical) evaluations of curriculum. Sixty-two percent favored both. About a quarter favored only qualitative evaluation information, while only 13 percent favored a quantitative approach alone. This may be interpreted in at least three ways: either quantitative methods are not commonly understood, or a new evaluation trend stressing qualitative approaches is taking effect, or school districts tend to prefer more informal measures of success over objective test instruments. Clearly, more study is needed here.

8. *Comments*. Content analysis of the unstructured comments section indicated that most respondents supported "teacher ownership" of curriculum—again consistent with the results of items four and five. Comments included the following:

"Teachers need to be involved right from the start."

"If teachers don't feel committed [to the change], no one else will."

"I can't imagine trying a change in curriculum without getting the teachers to participate in the decision."

Of equal weight, however, is the call among the respondents for both periodic updating of curriculum and for administrative support for teachers implementing change. This endorsement of administrative support for curriculum development also is consistent with the response for item 5.

Implications of the Results

Assuming that this random sampling of school systems in the U.S. yielded an honest profile of current practice, the following inferences from the results may be useful to curriculum leaders and to students of curriculum development.

1. Basic core subjects (language, reading, and math) are still the focus of systematic curriculum development efforts at the local level.

2. A large proportion of school districts, perhaps due to the leadership of those responsible for curriculum development and revision, recognize the importance of systematic curriculum development, as opposed to the rapid, wholesale adoption of prepared curriculum.

3. The heavy involvement of teachers within curriculum committees appears to characterize school districts that develop curriculums locally. However, the model we developed and presented earlier calls for widening circles of teacher involvement over several years; that model currently does not appear to be in use on a wide scale.

4. Districts involved in curriculum development make little systematic use of prior research.

5. The development of a philosophy for the curriculum appears to have a low priority.

6. Evaluative instruments are rarely used to refine the curriculum objectives for a new locally developed curriculum.

7. The active participation of building administrators (principals and supervisors) is a feature of the curriculum development process in many school districts. This involvement may be an implicit recognition of the importance of administrative support in institutionalizing a curriculum change.

8. We have no evidence of a decline in the use of textbooks, but commercial curriculums apparently are not used as the foundation for curriculums developed locally. Students of curriculum have long known that adopted curriculums often differ from what teachers actually teach. Further study is needed, however, to learn whether districts develop local curriculums to match a published series or purchase material that fits their own curriculum specifications.

"Respondents were asked if they favored national, state, or local curriculums; . . . 84 percent chose local."

A sizable minority, however, would prefer to purchase a commercial curriculum (see table 4); possible explanations here would include lack of funds for local development, lack of trained curriculum leaders, interest in measuring teacher performance against some external "standard," or the conviction that a local school district cannot develop a complete curriculum that can compete with tested, high-quality commercial materials developed by well-financed publishers.

9. Nearly half of the respondents affirmed the importance of a balanced evaluation design. Many curriculum writers (e.g., Eisner 1979) have expressed concern about the exclusive use of quantitative evaluation. Perhaps these writers and conference speakers, along with training programs for curriculum leaders, may be having some positive effect; alternatively, we might infer that many school districts are satisfied with more informal judgments of the success of a new curriculum. Again, further study is needed.

10. The frequency of the comment about the importance of teacher ownership in curriculum development is also evidence that top-down models are inadequate for bringing about meaningful and lasting curriculum change. This inference, again, deserves further investigation.

11. The relationship between development and implementation apparently is not clearly defined in many districts. The process of curriculum development has multiple steps that usually culminate in a product. At that point, curriculum implementation, also a multistep process, begins. These two processes should be seen as a continuum, with implementation smoothly following or even overlapping slightly with the curriculum development stage. They both should involve many of the same professional personnel to assure this continuity, as illustrated in the model presented earlier. However, curriculum development and implementation are in fact often carried out separately; frequently leaders from a central office (with or without teacher involvement) develop curriculum, and then teachers and principals implement it. Curriculum leaders should strive to create a continuum that ensures consistency.

Our representative sample of curriculum leaders indicates that the trend is to involve teachers broadly in curriculum committees. Time and additional research will answer the larger question of how deep and lasting this development will be, particularly in the face of shrinking school budgets. The challenge for American curriculum leaders is to maintain and enhance the teacher-ownership model with its requirement for large investments of time, and to resist the temptation to surrender curriculum decisions to outside forces, both at state and local levels.□

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David S. Martin is Dean, School of Education and Human Services, Gallaudet University, Washington, DC 20002. **Philip S. Saif** is Affiliate Professor, School of Professional Studies, George Mason University, Fairfax, VA 20030. **Linda Thiel** is Specialist, Research and Evaluation, Gallaudet University, Washington, DC 20002.

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PAUL S. GEORGE AND LYNN L. OLDAKER

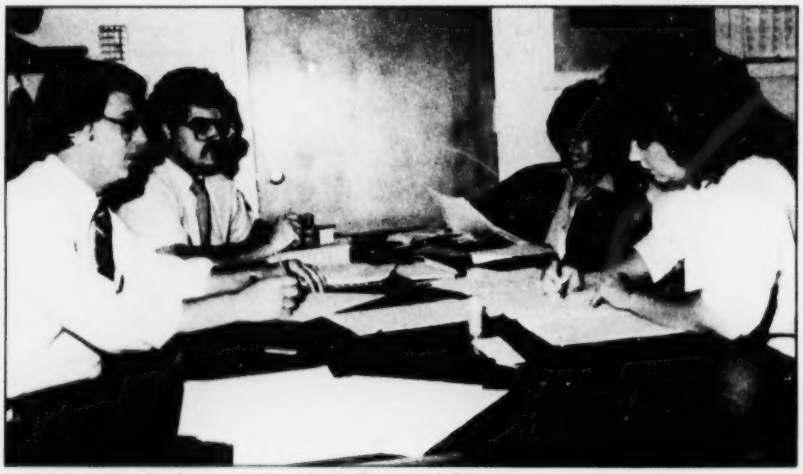
A National Survey of Middle School Effectiveness

Data from 130 exemplary schools show that changing to middle school organization positively affects student achievement and personal development, learning climate, faculty morale, staff development, and parental and community involvement.

The middle school movement is one of the largest, most comprehensive efforts at educational reorganization in the history of American public schooling. Only the decades-long school consolidation process rivals it in terms of the number of school districts and students involved. Each year more districts open newly reorganized middle schools as alternatives to K-8, 7-9, 7-12, or other plans. Although decreasing enrollments have spurred a decline in the overall number of all types of middle level schools in the U.S., the number of identified middle schools continues to increase (NIE, 1983).

The lack of consistency used to evaluate the effectiveness of middle school programs—and the inconclusiveness of the available research—prompted us to conduct our own study in the fall of 1983. We invited central office staff members and school administrators in 34 states to supply data about the effects of implementing middle school programs in their districts.

We developed a list of reputedly exemplary middle schools from schools identified by (1) the 1982 Study of Well-Disciplined Schools sponsored by Phi Delta Kappa, (2) the 1983 DOE National Secondary School Recognition Program, (3) a panel of ten persons recognized as experts in middle school education, and (4) several lists from books on middle school education. Of the schools we contacted, 130 (81 percent) responded.

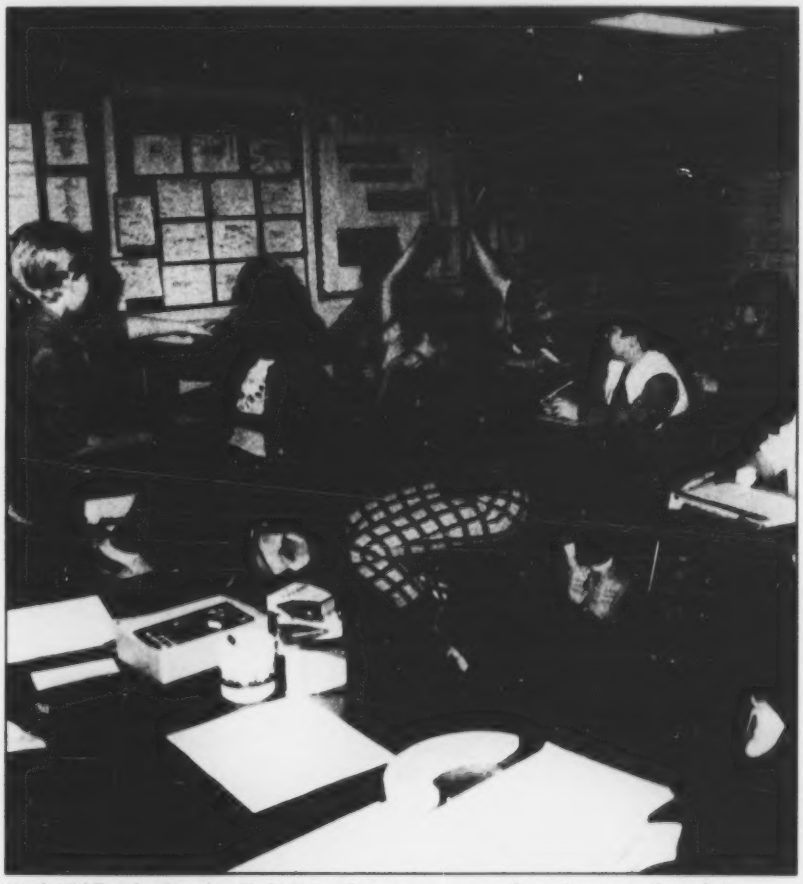


Photographs courtesy of Fred Newton, North Middle School, Fort Campbell, Ky.

To ascertain the degree to which the programs of these schools could be deemed effective for the education of early adolescents, we asked each respondent to supply detailed information about the extent to which the school conformed to certain guidelines. For instance,

- Ninety percent organized teachers and students into interdisciplinary teams, rather than self-contained and departmentalized instruction.
- Ninety-four percent used flexible scheduling during the school day, often with some kind of block schedule.
- Ninety-three percent included a home base period and teacher-advisor for each student.
- All of the respondents said their programs were designed with the nature of middle school students in mind.
- Ninety-nine percent focused curriculum on students' personal development and skills for continued learning, and a wide range of exploratory activities.
- All reported that administrators and faculty members collaborated on decisions that shaped school policy.

These data indicate that the schools in this sample are characterized by the central components of the middle school philosophy. They are more than "middle" schools; they are schools that have achieved significant



North Middle School student Todd Meredith invites comments from classmates about their perceptions of his attitudes and behavior.

local, state, or national recognition by using a format that is relatively common.

Thus, our survey data apply most directly to other middle schools following that same format. We made no attempt to control or analyze data on the bases of socioeconomic status, school size, geographic location, or the influence of school leadership or talented instruction. Our conclusions are limited by the fact that we encouraged respondents to supply evidence regarding the positive effects of their middle school programs and not to stress negative aspects.

Student Achievement Rises

Our survey results dispute earlier opinions that academic achievement is either unaffected or only modestly improved by a move to middle school organization. Sixty-two percent of the respondents described consistent academic improvement. An additional 28 percent supplied specific results demonstrating increased scores on state assessment tests, the California Achievement Test, the Iowa Test of Basic Skills, and similar tests. Eighty-five percent observed that teacher confidence in student abilities had increased, which, many suggested, led to higher expectations and greater student productivity. Other aspects of reorganized programs positively affecting student learning included coordination of skills and subjects by interdisciplinary teams as well as greater teacher awareness of preadolescent needs and abilities. Clearly, the experience of the most highly acclaimed middle schools is that academic achievement can be expected to improve following reorganization.

Discipline Problems Decrease

Reorganization improved discipline in almost every measurable manner. Tardiness and truancy decreased moderately or greatly according to a majority of respondents, as did school vandalism and theft. Approximately 80 percent noted a significant reduction in office referrals and suspensions, while close to 60 percent expelled fewer students after the transition. Almost 90 percent observed that teacher and staff confidence in managing disruptive students increased, diminishing involvement in discipline in many schools.

All the ancedotal evidence supported the positive effects of middle school programs on discipline. One-fourth of the respondents indicated that interdisciplinary team organization and grouping students in houses enabled teachers to develop consistent procedures for handling disruptions. Advisor-advisee programs and greater emphasis on school guidance improved communication and empathy between teachers and students, often defusing volatile emotions before they exploded in classroom confrontations. The cultivation of parental support in enforcing disciplinary actions greatly improved student behavior. Implementing highly structured discipline plans—such as Glasser's Reality Therapy and Canter's Assertive Discipline, which need teacher-teacher and teacher-administrator collaboration to be effective—was facilitated by staff development programs accompanying reorganization. Several respondents suggested that moving 9th graders to high schools left a group of younger adolescents more similar developmentally and generally less sophisticated and troublesome. When reoganization follows the pattern common to the schools administered by these respondents, educators and parents can expect a decrease in discipline problems.

Student Personal Development Is Enhanced

Certainly, one of the long-espoused goals of the middle school has been to focus on the unique nature and needs of young adolescents. Our results indicate that exemplary middle schools have been very successful in promoting student personal development. Over 80 percent of the respondents testified that student emotional health,

creativity, and confidence in self-directed learning were positively affected by reorganization. Over 90 percent believed that student self-concept and social development also benefited.

Not a single respondent reported negative effects on student personal development. The success of team organization and teacher-based guidance in helping individuals develop closer peer relationships was cited repeatedly. Extracurricular and intramural athletic activities were open to all students and invited greater student participation, interaction, and competition. Awards for leadership, good citizenship, and cooperation in and out of classes enabled those who weren't honor roll students or star athletes to experience the important satisfaction of peer recognition. Interdisciplinary teams, classroom guidance, and exploratory programs increased opportunities for student involvement and accomplishments, significantly improving student personal development.

Reorganization appeared to delay certain social pressures that seem to precipitate an undesirable sophistication in young people today. Schools can work with students before major growth spurts associated with puberty and help them adjust to new academic environments before problems develop. "No school-sponsored dances certainly delays the mating process!" quipped one respondent. Others conveyed strong parental support for their efforts to slow down preadolescent maturation.

Many respondents specifically attributed gains in student personal development to effective teacher guidance. A part of the original junior high concept, the classroom advisory group is making a strong comeback in reorganized middle schools. Although many respondents indicated that successful implementation was difficult, they praised its impact on helping students understand themselves and others during the trying time of early adolescence. When conceived and conducted with care, advisor-advisee programs appear gratifying to all involved.

School Learning Climate Turns Positive

Recent studies analyzing school effectiveness correlate learning climate with student behavior and achievement. Students who feel valued by teachers and view school as more than just a place to meet friends tend to show respect for their schools. The exemplary schools in this study developed programs that demonstrate persistent caring for students as young people and create a school environment to meet their special academic and personal needs. Predictably, respondents reported stronger school spirit since reorganization. Over 95 percent declared that students' attitudes toward school and feelings about teachers became moderately or strongly positive. Eighty-six percent witnessed greater student participation in special interest activities, while 75 percent noted better school attendance. Descriptions of student enthusiasm for involvement in school programs ran nearly five to one in favor of changes brought about by a move to middle school organization.

"Advisor-advisee programs and greater emphasis on school guidance improved communication and empathy between teachers and students, often defusing volatile emotions before they exploded in classroom confrontations."

Photograph by John Schroeder

In discussions of reorganizing in schools from junior high to middle schools, educators and citizens often express concern about the proper role of interscholastic competition, cheerleading, and athletic awards. Proponents of such activities argue that their elimination will negatively affect school spirit; opponents stress that their inclusion in schools will exclude most students from participation and recognition, weakening school spirit. Our survey results indicate that when curriculums are designed to encourage greater student involvement in different ways, removal or significant modification of interscholastic sports programs does not diminish student pride and positive feelings. Failure to compensate for altering conventional athletic competition during reorganization, however, can be costly to school pride.

Photograph by John Schroeder, Parkside Middle School, High Point, North Carolina

The majority of respondents identified new activities that effectively replaced traditional ones in generating student excitement and participation. Advisory groups and interdisciplinary team programs successfully stimulated student involvement, as did offering intramurals, clubs, exploratory classes, and awards for effort and excellence. Several schools retained interscholastic sports and cheerleading by restructuring them to include more students or by shifting responsibility for them to community agencies allowed to use school facilities after hours.

Faculty Morale Improves

Because of the complexities of our education system and frequent criticism by parents, politicians, and the press, many public school teachers exhibit alarmingly but understandably low morale. Not so in the nation's exemplary middle schools. An impressive 94 percent of the respondents described staff morale and rapport as either moderately or strongly positive following reorganization. Based on formal and informal observations, 93 percent concluded that a move to middle school organization favorably influenced staff attitudes toward change, and 82 percent noticed increased staff participation in special interest activities following the transition. Over half of the respondents cited lower teacher absenteeism and turnover, noting that some teachers fought transfers to other schools. All anecdotal comments but one praised the benefits to morale of implementating a middle school philosophy. Teachers voiced greater job satisfaction, and said that they worked more closely with one another and spent more leisure time together.

Such positive faculty morale did not magically appear when the middle schools opened their doors. Some faculty members lacked enthusiasm for reorganization and resisted change efforts. A noticeable number of secondary-trained teachers thought that some of the new things they were expected

to do were unreasonable. As they enjoyed increased support on teams and more control over learning time, however, many skeptical teachers developed an appreciation for the appropriateness of middle school programs. Even those disillusioned with district policies and budgets, by a national clamor for educational reform, or with contract negotiations often conceded later that reorganization improved schooling and made their jobs more rewarding. One respondent's comment that it took ten years before his staff truly supported the middle school concept suggests that considerable patience may be a prerequisite for developing strong faculty morale. Other comments expressed concern about the life span of staff enthusiasm in middle schools, mentioning that some teachers could overextend themselves and lose interest within a few years if precautions were not taken.

Respondents reported that the interdisciplinary team organization component of the middle school program contributed greatly to staff morale. Previously isolated instructors became team members and developed the same sense of belonging and camaraderie they hoped to instill in their students. The flexibility in scheduling, which is inherent to team responsibility for a common group of students occupying generally the same area of the school, provided teachers with many options for instruction. Sharing knowledge of students and subjects increased their confidence and consistency.

Photographs by Roger Lasher, Chinook Middle School, Lacey, Washington

Staff Development Is Effective

Reorganization to middle schools, according to respondents, provided ample opportunities for teachers, principals, and district administrators to coordinate efforts to improve instruction and classroom management by requiring extensive staff development programs. Acknowledging that some teachers are more responsive to change than others and that staff members can occasionaly be worn down by too much inservice, administrators nonetheless noted greater staff development in designing and executing philosophy, curriculum, and objectives when they conducted staff development programs to facilitate reorganization. Inservice programs (characteristics of young adolescents, interdisciplinary teams, advisory-advisee groups) and educational improvement programs applicable to all grades (Effective Schooling, Instruction Theory Into Practice, Assertive Discipline, Reality Therapy) provided middle school staff with research findings and practices that can revitalize teaching and learning in these crucial grades. Most schools in the survey assessed teachers' needs and interests prior to, during, and after the transition; enlisted the aid of local universities and colleges when possible; encouraged individual and group attendance to state and national conferences about middle school education; and scheduled dozens of inservice workshops to improve instruction.

Parental Involvement and Support Strengthens

Survey respondents proudly described the positive parental involvement and support they experienced after reorganization to middle schools. They cited better attendance at open houses, conferences, and PTA meetings, as well as a greater propensity to volunteer as chaperones for field trips, dances, or other school socials; to help in libraries, cafeterias, and classrooms; to coach intramural athletics; and to teach minicourses in many of the ex-

Photograph by John Schroeder

"Reorganization appeared to delay certain social pressures that seem to precipitate an undesirable sophistication in young people today."

emplary middle schools. Administrators cultivated parental involvement during all stages of the transition, anticipating the potential value of their contributions and support. They took pains to explain why and how reorganization would improve schooling for their children and established communication channels that encouraged parents to ask questions and to make suggestions at any point in the reorganization process.

Administrators sought to capitalize on parental willingness to share responsibility for their children's education and were well rewarded for their efforts. One respondent boasted that parents told him, "You cannot change your program until my last child has gone through it!" and "My child likes school for the first time." Parents often voiced support for the middle school at board meetings and frequently voted to provide the money needed to maintain the level of educational services characteristic of exemplary middle schools.

Community Involvement and Coverage Is Favorable

Admitting that community concern for the cost of public education can spell financial trouble for reorganization programs—particularly those that require money to provide facilities and retrain staff—our respondents nonetheless reported favorable community support. Businesses, civic organizations, and community leaders resemble parents in their willingness to contribute to the schooling of middle level students. They attend and present assemblies, fund-raising events, and career awareness programs, thus generating and diffusing valuable support for the middle school throughout the community. People with and without children in the schools volunteer

to cover classes, tutor exceptional students, and sponsor clubs, according to many administrators in our survey. "All we have to do is ask!" wrote one about his community's eagerness to help in the school. Other administrators related that although they would like to have even more community involvement and support, they were generally pleased with existing levels.

High School Staff Perceptions Moderate

In stark contrast to the strong vote of confidence given to middle school reorganization by parents, teachers, and surrounding communities, support wavered among high school staff. Barely half of the respondents from middle schools surveyed reported praise and approval from the upper grade teachers to whom they sent students. Most added that to earn support they had to overcome earlier suspicions and fears voiced by high school teachers who doubted the seriousness of middle school programs. Many acknowledged district emphasis on K-12 curriculum and articulation as very helpful in establishing positive reputations and relations with high schools. A few noted that reorganization inspired some high school teachers to improve their programs by implementing 9th grade interdisciplinary teams and by maintaining the close parent-teacher-student contact developed in the middle grades. Some respondents indicated great pride when told by senior high staff that the middle schools must be doing something right since students were well prepared for their final school years. However, even this group who receive favorable support from their secondary counterparts expressed difficulty in pleasing high school personnel.

The other 46 percent of respondents reported criticism, fickle support, or apathy toward their programs on the part of the high school staff. Often high school teachers said that only those in the upper grades really teach and that it would be a step down to teach in middle school. The absence of ability grouping and interscholastic athletics was thought to disrupt high school programs, eliciting more negative comments. If reorganization moved 9th graders to high schools, contributed to overcrowding, or required a reallocation of funds previously designated for the high school, many high school instructors appeared to be quick to disregard any merit assigned to a program based on preadolescent needs. Many respondents suggested that schools at all levels should work hard to improve communication and cooperation. A few proposed reassigning district teachers to different buildings and grades more often and encouraging K-12 articulation to promote positive feelings among schools.

Dramatically Positive Results

The results of our survey indicate that highly successful middle schools have very similar programs, which tend to conform to the recommendations in the literature of middle level education in the last half century. Such programs are distinctly different from those common to elementary and high schools. When implemented in this way, the results are dramatically positive in terms of academic achievement, student behavior, school learning climate, faculty morale, and staff development.□

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Paul S. George is professor of education, University of Florida, Gainesville, FL 32611. **Lynn L. Oldaker** is a teacher at Dryden Middle School, Juneau Public Schools, Box 210996, Auke Bay, AK 99821.

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School Reform and Potential Dropouts

The main reasons students drop out of school are poor grades and family and money problems. Raising standards for time spent in school, content of the curriculum, and amount of homework may further compound students' problems and cause even more of them to drop out.

GARY NATRIELLO, EDWARD L. MCDILL, AND AARON M. PALLAS

School leaders have cause for both celebration and caution. Education has finally returned to the forefront of policy discussions at the state and national levels, and educators have both an opportunity and a responsibility to secure increased support for American schools. However, as with all widespread movements, the current reform effort has its own direction and momentum; while it directs attention to certain problems in schools, it may divert much-needed attention from problems that are equally pressing, such as the growing number of high school dropouts.

The Severity and Nature of the Dropout Problem

Nearly one-third of respondents in a 1979 national survey of school administrators cited early dropouts as a problem in their districts; over half of the administrators in districts with more than 25,000 students reported that early dropouts are a problem.

While reliable statistics on school attendance are difficult to obtain, it is estimated that approximately 25 percent of all 18-year-olds have not graduated from high school. Although different sources present different figures, this rate has remained fairly stable over the last decade. Most youngsters who drop out do so after they have entered the 9th grade (Dearman and Plisko, 1979).

The economic costs of dropping out are also difficult to estimate, but Levin (1972) projected $71 billion of lost tax revenue from high school dropouts aged 25–34, welfare and unemployment costs of $3 billion, and crime and crime prevention costs of $3 billion.

Students drop out of high school for a variety of often interrelated reasons, which generally fall into three major categories:

1. *Poor academic performance*, primarily low grades, is the most common reason students leave high school. Students who perform at one or more years below grade level or have failed one or more grades are most likely to drop out. In addition to poor grades and academic performance, expulsion and suspension also indicate school problems that lead to dropping out. It is not surprising that students who do not perform well in school seek to leave the environment that provides negative feedback.

2. *Conditions in the student's family* can lead to an increased likelihood of dropping out. Students from single-parent homes are twice as likely to drop out of school as are students living with both parents, and eight of ten teenage mothers under the age of 17 never finish high school.

3. *Economic issues*, such as a disadvantaged family background, also increase the probability of dropping out; and many students report leaving school to go to work. Twenty-five percent of all 14-year-olds and over 50 percent of all 17-year-olds were employed at least part-time in 1979 (Michael and Tuma, 1983). High school seniors who worked averaged 15 to 18 hours of work per week, and very intensive work involvement is associated with higher rates of dropping out for at least some groups of youths (D'Amico, 1984). Serious economic pressures lead many students to drop out of school.

The Current School Reform Movement: The Commissions and Their Omissions

In examining the current movement for school reform and its implications for potential dropouts, we must con-

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"If school administrators are to be held accountable for the performance of their schools, they should hold governors, legislators, and national commissions accountable for the effectiveness of their reform policies."

sider the national commission reports that generated the latest wave of school reform and the responses of policymakers to the recommendations made in these reports. Both almost totally ignore the dropout problem in considering ways to improve education. Recommendations to raise standards fall into three broad areas:

1. *Course content*. The National Commission on Excellence (1983) advocates five new basics: four years of English; three years each of mathematics, science, and social studies; and one-half year of computer science. Other reports have advocated more science and mathematics courses (National Science Board Commission, 1983) or the elimination of the soft, nonessential courses (Task Force on Education for Economic Growth, 1983), but the general message is the same: students should pursue more demanding sequences of basic courses. If these recommendations are implemented, students will have fewer choices in selecting courses, and curriculums will offer a more restricted range of courses. While seldom fully adopting the commissions' recommendations, at least 40 states have increased the number of academic courses required for high school graduation (Fiske, 1984).

2. *The use of time for instruction and learning*. The National Commission on Excellence and the Task Force on Education for Economic Growth recommend longer school days and years. The National Science Board Commission also suggests a longer school week to provide the time necessary for increased science and mathematics instruction. Both the National Commission on Excellence and the Task Force on Education for Economic Growth argue for increases in homework requirements and attention to attendance requirements. They are joined by Goodlad (1983) in stressing that better use should be made of in-school time.

The state-level response has typically concerned increasing in-school time. Twenty-three states have taken steps to increase the time students spend in school (Fiske, 1984). Local districts have moved to establish or increase homework requirements; for example, Oklahoma City's new homework policy requires 30 minutes of homework each night for elementary students and two hours each night for high school students (U.S. Department of Education, 1984).

3. *Student achievement*. Both the National Commission on Excellence and the Task Force on Education for Economic Growth have called for the use of grades solely to indicate achievement, not as motivational devices reflective of student effort. A second form of achievement standard calls for the end of social promotion and the use of rigorous grade promotion policies by which students will be promoted only when it is academically justified (National Commission on Excellence, 1983; National Science Board Commission, 1983; Task Force on Education for Economic Growth, 1983). Finally, several reports have recommended the use of standardized tests to monitor student achievement at specified intervals. Boyer (1983) argues for the use of a language proficiency test prior to high school admission with remediation of any deficiencies during the summer. The National Commission on Excellence recommends the use of achievement tests at major transition points, particularly in the move from high school to college. The Task Force on Education for Economic Growth advocates periodic testing of achievement and skills.

State-level activity in this area actually pre-dated the recent commission reports. In the late 1970s, states started requiring testing of students to ensure certain levels of achievement. By 1984, 29 states had established some type of testing program, and 13 additional states were considering adopting one (U.S. Department of Education, 1984). While the standards set by many states may appear low, these tests represent yet another hurdle for students hoping to graduate from high school.

Taken together, the call for higher standards in curriculum content, learning time, and achievement levels seems to be based on five assumptions: (1) current standards are too low, (2) more demanding content and more time allocated to school will lead to greater individual student effort, (3) greater student effort will lead to improved achievement, (4) the relationships between standards and effort and between effort and achievement will hold for all students, and (5) no negative consequences will be associated with the more demanding standards. These assumptions, like the specific commission recommendations based on them, fail to consider our population at risk—potential dropouts.

Higher Standards and Potential Dropouts

In an analysis of data from the Educational Testing Service's Study of Academic Prediction and Growth, Alexander and Pallas (1984) showed that although the overall advantages of increasing core requirements in the "new basics" are clear, these core requirements seem to have little effect on the performance of students with relatively low grade point averages. In fact, they conclude that the lowest performing youngsters are apparently a little bit better off outside the core.

Not only the substance, but the re-

sulting form of the curriculum—a single pattern of courses taken by most students—may also have negative effects. The core curriculum is mainly composed of academic courses, all of which tap ability along a narrow range. Implementing the new curriculum requirements will restrict the variation in school experiences for students, limit the number of dimensions of ability deemed legitimate within the school, and curtail student choice in constructing a program of study. Potential dropouts, typically students with limited ability along this one dimension, may have to face repeated failure with little opportunity to engage in other school activities that might afford them some sense of success.

Increasing the time students spend on school tasks does seem to have positive effects on learning, even for students likely to be potential dropouts. For example, Keith (1982), in an analysis of data from the High School and Beyond Study, found that low-ability students who do one to three hours of homework weekly achieve grades commensurate with those of average students who do no homework. The problem is not that increased time on school tasks is ineffective; rather, the problem is motivating students to spend additional time on school tasks.

Longer school days and years may not result in greater time on school tasks, as these increases may require additional breaks, and teachers and students may encounter problems with fatigue. An additional 30 minutes at the end of the school day or an additional week at the end of the school year may add little to real learning time. Moreover, such demands may be problematic for potential dropouts, who are more likely than other students to have assumed adult responsibilities related to families and jobs. Furthermore, increasing time spent on school work and homework may prevent participation in extracurricular activities, thus denying students who do not perform well in the classroom access to activities that build a normative attachment to the school and provide avenues of success (Otto and Alwin, 1977). Increasing the time demands on potential dropouts may present them with a severe conflict that may be most easily resolved by leaving school.

The impact of higher achievement standards on potential dropouts is apparently mixed. A series of studies reported by Natriello and Dornbusch (1984) found that students in classrooms with very low standards were more likely to cut class than students in classrooms with more demanding standards. Moreover, a higher demand level in the classroom was found to be associated with greater student effort even when the students' ability level was controlled. In the low-demand classrooms, the highest proportion of students reported that they felt the teacher should make them work harder. However, these studies also showed that high-demand classrooms often lose low-ability students, who try less hard when the pace is too fast.

These dual effects of raising achievement standards, (sometimes challenging students, sometimes frustrating them) appear in the limited information we have on the impact of minimal competency testing. While systematic, evaluative studies on the impact of minimal competency testing are currently unavailable, the failure rates on such tests are clearly much higher for economically disadvantaged and minority students, two sociodemographic groups with high dropout rates (Jaeger, 1982). If academic standards are raised and students are not provided substantial remediation within the limited time they can devote to school tasks, socially and academically disadvantaged students will be more likely to experience frustration and failure, which can result in notable increases in dropping out.

Implications for School Administrators

If we are to avoid some of the serious negative effects of the current reforms on potential dropouts, discussions of the problem that have been uncommon at the national and state levels must become common at the district and building levels. It is there that the dropout problem cannot be ignored. Accordingly, we suggest that school administrators:

1. *Redouble efforts to monitor dropouts at the district and building level.* It is difficult and time consuming to collect valid information on students who leave high school prior to graduation; they often disappear without formal warning, becoming invisible problems. To fully understand the dimensions and patterns of their particular dropout problems, local administrators must collect systematic information on students who drop out, and use it in at least three ways. First, internal variations in the patterns of dropouts within schools and districts can alert administrators to potential policies that might encourage students to complete their high school education. Second, information collected on dropout rates can, over time, help in understanding the impact of changes such as those currently being implemented as part of the current wave of reforms. Third, hard evidence on the magnitude of the dropout problem can be used to bring the dropout problem to the attention of state and national policymakers.

2. *Insist on adequate evaluation of the new reform policies.* Careful program evaluation is expensive and time consuming; yet it is essential to judging the efficacy of changing standards for performance. While individual districts and schools can monitor the impact of new policies on their students, only state-level evaluation efforts can examine their impact across districts within a state, and only national evaluation efforts can examine the impact of diverse state policies on schools and districts in various states. If school administrators are to be held accountable for the performance of their schools, they should hold governors, legislators, and national commissions accountable for the effectiveness of their reform policies. Despite the tone of the recent commission reports and the quick action by various states, it is not clear how to raise standards for uniformly good effect.

3. *Insist that effects on potential dropouts be considered in any assessments of the reforms.* To assess the true impact of the reforms in terms of aggregate outcome measures requires the use of what we refer to as a "full-enrollment" approach in calculating such measures, as opposed to a "survivor" approach, as is typically done at present. The survivor approach includes final outcome scores only for those students who remain enrolled through the 12th grade, or whenever outcome measures are collected. Under a full-enrollment approach, aggregate performance measures would include scores of students who dropped out of school before graduation. Scores for dropouts might be estimated on the basis of their earlier test scores and background characteristics. In any case, such an approach would reduce aggregate scores by making them reflective of outcomes for both students who graduate and those who drop out. This would prevent policymakers from claiming as successful those reforms that simply rid the schools of students with performance problems.

4. *Continue to serve potential dropouts with special programs that have proven successful in the past.* While there has been relatively little systematic evaluation of many of these programs, certain features appear to work well with potential dropouts, including (1) relatively small programs or schools that offer more responsive environments for students; (2) individualized curriculums and instructional approaches that tailor course content and mode and pace of instruction to the aptitudes and interests of students; and (3) learning climates characterized by clear and fair rules, reward systems reflective of individual student effort and progress, and a normative emphasis on academic excellence (U.S. Department of Justice, 1980).

5. *Provide educational services with flexible time options.* Our analysis suggests that potential dropouts are subject to severe time constraints. Since the economic and family demands placed on such students typically cannot be alleviated, school administrators should modify the time demands the educational system places on them by experimenting with programs that are less concentrated and of longer duration. It may be reasonable for many potential dropouts to achieve higher standards by planning to participate in high school for an additional year, thereby reducing their course load. It would be important to remove the stigma of failure from such an option; planning to remain in high school part-time for an additional year should have a different meaning than being retained in a grade and repeating a full course load. College administrators have grown accustomed to students who stretch out their undergraduate careers without any sense of failure, and high school administrators should be encouraged to do the same. Only in this way will many potential dropouts escape the severe time conflicts that prevent them from doing well initially and benefiting from remedial services when necessary.

Conclusion

We have listed a full and heavy agenda of responsibilities for district- and building-level administrators. Parents, the local community, and state and national policymakers may be enlisted to help, but recent experience suggests that it is *local educational leaders* who will have to keep the dropout problem in the public eye.□

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Gary Natriello is Assistant Professor of Sociology and Education, Teachers College, Columbia University, New York, New York 10027. **Edward L. McDill** is Professor of Sociology and Co-Director of the Center for Social Organization of Schools, Johns Hopkins University, Baltimore, Maryland 21218. **Aaron M. Pallas** is Statistician, National Center for Education Statistics, U.S. Department of Education, Washington, D.C.

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New Flexibility in Curriculum Development through Word Processing

Computer technology makes it possible to develop, test, and refine instructional materials in the classrooms where they will be used.

JON MADIAN

Many educators and educational publishers view the computer as an elaborate teaching machine that can provide programmed instruction and drill and practice on materials printed in textbooks. While this approach aligns software with standard texts and lessons, it may do so at the expense of instructional excellence. The approach is likely to compound the problems in a curriculum already organized around feeding facts to students.

The virtue of many textbooks is their organization, sequencing, and standard methods for presentation, study, and testing. Textbooks help burdened teachers in much the same way that TV dinners help burdened homemakers. But no thoughtful educator approves of a completely textbook-oriented curriculum any more than a good cook serves only TV dinners. The problems of textbooks lie in their overspecialization and lack of aesthetic sensitivity and intellectual organization.

Computing Language Arts

Probably 70 percent of schooling, particularly in grades 1–6, is spent in language arts: learning to speak, listen, write, and read. Can software be written so computer technology can help meet language arts and other curriculum objectives meaningfully, beyond merely reinforcing limited technical skills or providing remedial instruction? If so, the computer will find a meaningful place in the mainstream of the elementary and secondary curriculum.

The critical questions are: how can we write a language arts curriculum in a machine format and have it come out more relevant than basal readers and other English textbooks? How many programmers will it take? How can they understand the dynamics of the classroom, or understand the students who will be using the machines? What will be the role of the teacher and of the learner?

Fortunately, educators do not need to depend upon new programs to create computer-based curriculums. The most flexible program for teaching reading and writing skills and for helping educators design, store, and publish curriculums already exists. In fact, it is used in many schools. That program is word processing, and in word processing (and data base management) we are likely to find the organizing axle around which the spokes of an integrated and expressive curriculum will evolve.

Data Base of Personalized Stories

Two curriculum development projects in the U.S. Department of Education Basic Skills Program used word processing to develop an integrated language arts program. In one project, writers of children's literature and specialists in arts-in-education and content areas used the word processor to store and print stories written to integrate and develop students' literary taste, enjoyment of learning, content knowledge, problem-solving, and communication skills.

Some stories were programmed so that students appeared by name as the story characters in the text. The students could then print the stories, enabling individuals, reading groups, and whole classes to read science, social studies, literature, and creative writing concepts while reading about themselves and their real or imagined experiences.

When students read stories designed to motivate their thinking, feeling, and imaginations, they were inspired to write creatively. Students typed their stories, poems, and thoughts directly into the word processor, or a teacher, secretary, or volunteer did it for them. Once the work was inserted, students looked at their drafts, either in hard copy or on the screen, and revised them. The final copies were then printed, closing the circle from reading to writing and back to reading. This application of computer technology whereby student writing can be stored, revised, edited, and finally printed may prove to have a profound impact on conventional education in the next decade.

Part of the success of these Basic Skills Program materials is due to their personalization: everyone likes to see his or her name in print. Another more significant reason for their success is that the stories are exceptionally well written. Three factors in the design process account for this. First, the authors are writers of children's literature and not writers of textbooks. Second, they are in residence in the classroom, consulting, teaching, observing, and interacting; thus, classroom events help to structure their design. Third, writers use the computer to revise and print the text in response to and with the help of students and teachers. The computer makes it easy to revise stories, field-test them, and revise them again if necessary. For the first time, we have the technology and methodology for a self-refining process of creating and implementing curriculum.

"As an alternative to centralized, textbook-based curriculum, word processing as a curriculum design tool enables developers to initiate and implement a flexible, self-refining process."

The Computer as a Literate Pen Pal

In another computer-assisted basic skills project, the word processor was used to help develop creative writing skills. A perennial difficulty in instructing composition and creative writing has been establishing a nonjudgmental interested audience for students. With this problem in mind, students in grades 6 to 8 were asked to name the school's new word processor. They chose the name HAM, for "Hot Air Machine."

After the students named HAM, the writer in residence wrote letters "from HAM" to help develop HAM's literary personality. HAM loved to write and read poetry, journals, and stories, was curious about science and history, and enjoyed storing, reinforcing, and printing students' creative writing.

HAM's letters were designed to motivate and model writing activities. HAM became a literate and literary pen pal for hundreds of students, and his nonjudgmental interest in students' self-expression and his "tireless efforts" to print student writing provided essential ingredients for a successful writing program.

Computers Can Change Curriculum Design

These two storytelling and creative writing projects demonstrate how computer technology can enable curriculum developers to work in residence in the classroom, creating, field-testing, and revising instructional materials and lesson plans to suit the needs of students and teachers. The only limitation on quality is the experience and sensitivity of the developers and users.

Many people have predicted that the high cost of computer programming will further centralize curriculum development. When word processing is used as a basis of curriculum design, however, expensive programming is not required. Creating materials directly on the word processor enables educators to adapt them to particular district, school, or class objectives, and to focus on the cognitive, affective, and aesthetic qualities of the materials. As an alternative to centralized, textbook-based curriculum, word processing as a curriculum design tool enables developers to initiate and implement a flexible, self-refining process.

In many industries computers have changed product design by changing the design process; they have also changed the methods of production. So too in education, computers can change the process of curriculum design and the method of distributing and printing curriculums. If we grasp the design, distribution, and publication capabilities inherent in applying computers to education, we can effect a radical redesign in materials and procedures in our schools.□

Jon Madian is editor of *Creative Word Processing in the Classroom* and president of Humanities Software, P.O. Box 590727, San Francisco, CA 94159.

Topic G

The Supervisor as Leader in Staff Development

STAFF DEVELOPMENT IS A VITAL PART OF THE OVERALL SCHOOL operation. Traditionally, supervisors have judged the responsibility for providing for the professional growth of school personnel to be one of their three most important tasks. In that same tradition, however, inservice education programs were most frequently arranged for teachers based on the needs of teachers as perceived by supervisors, principals, and other administrators. Courses, workshops, and sessions were planned that focused, for the most part, on training designed to improve one or many teaching skills. So common has been that focus that, in the vocabulary of many, the expression "inservice training" has become interchangeable with "inservice education."

In recent years inservice education, or staff development practices and programs, have been widely criticized—particularly by teacher groups and individual teachers who have been the primary targets of those practices and programs. The activities of traditional inservice education or staff development programs have often been labeled irrelevant, ineffective, and wastes of time and money. More recently, supervisors have begun, with fresh interest and strong determination, to seek ways of responding effectively to the professional growth needs and interests of teachers and all other staff members.

Responding to this increasingly widespread desire within the profession for more effective means for meeting staff development needs, many scholars and practitioners have begun to focus their writings on research findings in staff development, suggestions for more effective programs, and reports of success.

Wade has responded to the need for research findings related to staff development activities in "What Makes a Difference in Inservice Teacher Education? A Meta-Analysis of Research." From 91 studies meeting her rigid criteria for inclusion in the meta-analysis, Wade developed eight categories of variables (e.g., duration, participant incentives) to facilitate judgments concerning the effectiveness of inservice programs. The data lead to six conclusions offered by Wade as important guides for supervisors seeking to improve their programs of staff development.

"School Improvement Through Staff Development" describes a building-level staff development program that combined the resources of the university and the local school to "encourage teacher-directed school improvement." A facilitator from the university and the staff of the participating school work through six steps of a school improvement model. Sparks, Nowakowski, Hall, Alec, and Imrick describe the model, report two school success stories, and explain what makes the model work. At a time when there is much discussion of collaboration between universities and elementary and secondary schools, the article provides one such example.

In "School Improvement Is More than *School* Improvement," a university professor and two school district facilitators for school improvement address the context concerns in staff development. Wood, Freeland, and Szabo describe their work with a school district in upstate New York and conclude that while the school is the unit for change, central office administrators must understand and support school-based improvement. Practitioners will find the "essentials for success" which the authors identify to be worthy of consideration.

That teachers can teach their colleagues is the thesis of "Learnball League: Teacher-to-Teacher Staff Development." Two teachers, Marwood and McMullen, collaborate with Murray, the executive director of Learnball League, to report on Learnball, a classroom management approach. The article describes the technique and explains the three-step dissemination plan. It is from the third step in the plan, "teacher volunteers present Learnball at a teacher inservice," that the article derives its title. Both the approach to classroom management and the dissemination plan are worthy of further thought and discussion.

Guskey departs from the traditionally held assumption that staff development should focus first on initiating change in the beliefs, attitudes, and perceptions of teachers before attempting to make changes in classroom teaching practices. In "Staff Development and Teacher Change," he reports evidence to support a new model of staff development, one in which changes in teachers' beliefs and attitudes come *after* they employ new classroom practices and see improvements in student learning. He identifies three principles that need to be considered when planning and implementing effective staff development programs.

The following questions may prompt the reader to

look more closely at the articles and may stimulate discussion of them.

1. Consider the six suggestions for more effective inservice programs generated by Wade from her meta-analysis of research. To what extent is each of these suggestions implemented in the school(s) you currently serve?

2. Compare the school improvement model described by Sparks, Nowakowski, Hall, Alec, and Imrick with the one described by Wood, Freeland, and Szabo. How are the models alike? How are they different? Which do you believe might best be implemented in your school?

3. Outline the steps in the school improvement process described by Wood, Freeland, and Szabo. For each step in the process, specify the staff development needs of those involved.

4. Describe the procedures you would pursue to meet the demands of Step 3 of the Learnball League approach.

5. What support can be found in the other articles in Topic G for the three principles which Guskey identifies for consideration when planning and implementing effective staff development programs? Be specific in giving the author, direct quotation, and page for each statement of support.

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What Makes a Difference in Inservice Teacher Education? A Meta-Analysis of Research

Staff developers need to take a second look at coaching and voluntary participation, among other things, when determining what really matters.

RUTH K. WADE

Trying to keep abreast of the rapidly growing research on inservice education is a nearly impossible task.[1] Even if one can keep up with it, the results reported are often speculative, contradictory, and confusing. The research techniques, types of measurements, and the groups studied vary greatly among researchers. Drawing conclusions from such a heterogeneous conglomeration can lead to frustration and further confusion. Yet most research reviews and integrative works continue to be largely a pattern of reviewers' personal judgments, individual creativity, and preferred styles (Jackson, 1978).

Even though many more people are writing about staff development, few accounts present concrete evidence of its effects on teachers and students. Loucks and Melle (1982) conclude that most staff development reports are simply statements of participant satisfaction, which are then used to determine the success of a program. Baden (1982) suggests that inservice education should become a systematic effort to create behavior change in teachers and, eventually, in students. While participant satisfaction and local support are invaluable to inservice programs, there is a need to systematically determine their efficacy. Effectiveness should be measured not only at the level of the teacher-participant, but also at the level of the students with whom teachers interact.

Ruth K. Wade is Staff Development Coordinator, Amherst-Pelham Regional Schools, Amherst, Massachusetts.

Author's Note: *I am grateful to Professor Bill Wolf, University of Massachusetts, for his helpful critique of this article.*

What is needed is a systematic method for integrating findings across independent studies by converting them to a common base. Integrative analysis, or what Glass (1976) termed meta-analysis, provides the necessary perspective for this systematic integration.

With meta-analysis, all quantitative studies on a particular topic can be compared by making them part of a larger class or category: in this case, effects of inservice teacher training programs. The technique has limitations in that the researcher can only examine the data that commonly exist in a particular body of literature. The result, however, is precise quantitative estimates of the size of effect of various practices, based on a large number of studies.

Effect sizes are computed from summary statistics reported by authors. More specifically, effect size is the difference between the means of the treated and control groups divided by the standard deviation of the control group (Glass, 1977). By standardizing the scores, characterizing each as the size of the effect in relation to the standard deviation, the various sets of scores can be put on the same scale. After effect size calculations are made, statistical analyses can be used to identify the independent variables that account for the changes. A positive effect indicates that the experimental treatment was more effective than the control procedure, while a negative effect indicates that the control treatment was more effective. An effect size of .5 means that the treatment group showed one-half a standard deviation greater change than the control group.

In this study, I used meta-analysis to answer the following questions:

1. What are the effects of inservice training programs on teachers in the typical study?

2. Does inservice training have different effects for different intended instructional outcomes? For example, does the effect size vary if the goal of the training is increasing participant learning, changing participant behavior, eliciting positive participant reactions to the training, or influencing students of participants?

3. Finally, do the effects of training vary as a function of duration of training, training group characteristics, location and scheduling, sponsorship, incentives for participation, training group structure, and instructional techniques?

Method

I began by making an exhaustive search of the literature to obtain studies that met the topical criteria as well as provided the necessary data from which to calculate effect size. I reviewed over 300 journal articles, dissertations, and Educational Resources Information Center (ERIC) documents published or presented between 1968 and 1983; of these, 91 were selected for inclusion in this meta-analysis. To be included, a study needed to meet the following criteria: (1) the study was quantitative rather than qualitative; (2) the data necessary for calculating effect size were presented; (3) the data related to one of the major questions in this study; and (4) subjects of the study were public school teachers or their students in grades K-12.

I initially read many of these selected studies to determine the variables that were frequently represented in this body of literature and to ferret out the most commonly used independent variables. I came up with a list of 28 variables, which I grouped into eight categories in order to describe the main features of the studies. These variables include: (1) effect levels or goals of the training, (2) duration, (3) training group characteristics, (4) location and scheduling, (5) sponsorship, (6) participant incentives, (7) structure, and (8) instructional techniques. It is important to note that while I examined each variable independently, I also looked at variables 2 through 8 in terms of variable 1 to determine whether the goal of the training influenced the effect size of each variable.

I treated each study as an individual unit of analysis and considered multiple dependent variables or multiple comparison groups as separate data sets. The 91 studies yielded 715 data sets.

Results

1. *Effect Levels*. For all studies, I separated effect levels into four categories that defined the level at which the evaluation was directed:

- *Reaction* assessed how the participants felt about the inservice training.
- *Learning* measured (usually through pretests and post-tests) the amount of learning that was achieved.
- *Behavior* measured whether participants changed their behavior as a result of a staff development intervention.
- *Results* determined whether there was an impact in the classroom, usually on students, as a result of teacher training.

The findings indicate that inservice teacher education programs reported in the literature are moderately effective. Inservice treatment of any kind, on the average, resulted in .52 of a standard deviation greater change than control groups. Such an outcome should provide reassurance to staff developers and other educators who wonder whether the time, money, and effort invested make a difference.

When the data are grouped by the level at which the evaluation was directed, the findings are conclusive. Attempts to increase participants' *learning* through inservice teacher training are highly effective (.90 mean effect size); attempts to change participants' *behavior* and to elicit positive *reactions* to the training are moderately effective (.60 and .42 mean effect size, respectively); while attempts to demonstrate *results* by looking at the students of participants are only mildly effective (.37 mean effect size).

2. *Duration*. The studies in this meta-analysis indicated that there was no significant effect of length of treatment. This includes studies with training ranging from a few hours to those lasting more than 30 hours. Similarly, there was no significant difference in the effect sizes of programs lasting six months or less versus those lasting more than six months.

3. *Training Group Characteristics*. Training groups involving both elementary and secondary teachers achieved higher effect sizes than groups enrolling only elementary or only secondary level educators. My findings corroborate the often-reported fact that greater effects are evident after training a group of elementary teachers versus a group of secondary teachers, but working with both groups together may suggest some new training possibilities.

Contrary to popular opinion, whether a participant voluntarily chooses to

". . . the evidence is beginning to point to the fact that coaching, as an instructional technique, does not have the potential to alter teacher behavior. . . ."

attend inservice training or is required to attend does not make a significant difference in training effect size. It is reassuring to note that over 85 percent of the 609 data sets in this category reported voluntary participation; in fact, they had .23 standard deviations greater effectiveness than mandatory participation studies, but the difference was not statistically significant.

The size of the training group (1–20, 21–40, 41–60, greater than 60) did not have a significant effect on training results, nor did composition of the group in terms of whether participants were a faculty unit or a group of unrelated individuals.

4. *Location and Scheduling.* No location or scheduling variables produced a statistically significant impact on effect size. Variables included on-site versus off-site training and scheduling during or outside of school hours.

5. *Sponsorship.* Training programs initiated, developed, or funded by the state or federal government or a university were significantly more effective than those initiated within the school, either by teachers, administrators, or supervisors. This finding does not support the popular belief held by many staff developers that teacher-initiated training programs are more effective. Perhaps education professionals who work outside the schools have more time and financial resources available to develop, test, and present training programs for teachers. In any case, these results do not support the limited federal role in school improvement suggested by Berman and McLaughlin (1978), but do support the School Improvement Study (Loucks, 1983), which found high success rates in federal- as well as state-funded programs.

6. *Participant Incentives.* When a participant was selected to take part in training, either by being designated as a representative of a particular group

or through a competitive selection process, the effect size was significantly greater than for all other incentives studied. This effect may take place because the "best" people are chosen to participate, or perhaps these individuals work harder when they have been "chosen" to participate.

The incentive of college credit, followed by released time, produced moderately positive effect sizes. Pay, certificate renewal, and no incentive resulted in small positive effect sizes that were well below the mean effect size for all incentives studied.

7. *Structure*. Independent study produced the highest effect size of the structures examined. An explanation for this large effect may be that the independent study structure appeals to the most highly motivated people. There do not appear to be important differences in the effect sizes among workshops, courses, mini-courses, or institutes, all of which produced effect sizes near the mean and are moderately effective.

"Contrary to popular opinion, whether a participant voluntarily chooses to attend inservice training or is required to attend does not make a significant difference. . . ."

8. *Instructional Techniques*. The results of analyzing data by the types of instruction that yield the highest effect sizes indicate that four types of instruction are significantly more effective than others. The most effective instructional methods are observation of actual classroom practices, micro teaching, video/audio feedback, and practice.

Instructional methods associated with significantly lower effect sizes are discussion, lecture, games/simulations, and guided field trips.

In spite of many speculative claims that coaching greatly enhances instructional effectiveness, I could find no evidence for this in the 225 cases using coaching. Coaching, modeling, mutual assistance, printed material, production of instructional materials, programmed study, and film were all moderately effective but did not produce significantly higher effect sizes than the mean of all instructional methods examined.

The next logical question to examine is whether some combination of instructional methods produces significantly higher effect sizes than the mean of all instructional methods examined. I grouped together many different combinations of types of instruction to see if some particularly effective combination existed. These combinations included: (1) lecture, modeling, practice, coaching; (2) lecture, discussion, modeling, practice, coaching; (3) lecture, discussion, modeling, video/audio feedback, coaching; and many others. The result was that any combination resulted in an effect size somewhere near the mean attained for all instructional methods grouped together. Thus it appears that there is no "magical" combination of methods for effective instruction.

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Practical rather than theoretical instruction, with the instructor taking almost exclusive responsibility for the design and teaching of the class, results in significantly higher effect sizes. In classes where participants are encouraged to teach each other through classroom presentations, group work, and discussion sessions, a lower effect size results.

Although instructors represented many job categories (such as teacher, support staff, administrator, consultant, college personnel), only self-instruction produced a large positive effect size. This may say something about the effectiveness of self-instruction as a technique, but it more likely indicates that any individual who is motivated enough to complete a program of self-instruction is likely to achieve successful results. Support staff and college personnel as instructors are moderately effective, while teachers and state department of education representatives produced only small positive effects. Administrators and consultants did not have enough cases for making significant conclusions.

Conclusions

Meta-analysis provides an objective technique for research synthesis. Its emphasis on quantification ensures against projecting personal bias onto a vast field of educational research. Most of my findings are consistent with earlier meta-analyses of inservice training by Joslin (1980) and Lawrence and Harrison (1980). However, I examined several new categories that had not been previously examined through meta-analysis. My findings contradict some commonly held assumptions regarding effective training practices.

There is no "magic formula" for effective inservice programs. Figure 1 provides a summary of practices associated with statistically significant, above-average effectiveness. Staff developers who wish to plan programs for maximum effectiveness should contemplate the following suggestions, which are based on the outcomes of this meta-analysis:

1. Plan programs in which elementary and secondary teachers can participate in training together whenever appropriate.
2. Encourage teachers to become involved in state-, federal-, or university-initiated programs.
3. Offer incentives for participation, such as enhanced status or college credit, whenever possible.
4. Encourage independent study and self-instruction as alternatives to the traditional workshop format.
5. Suggest that instructors set clear goals and take major responsibility for the design and teaching of the class rather than encouraging participants to assume these roles.
6. Use instructional techniques such as observation, micro teaching, video/audio feedback, and practice as alternatives to lecture, discussion, games/simulations, and guided field trips.

Throughout the staff development literature, coaching has been cited as an effective technique for achieving "transfer of training." As Griffin (1982) noted, "this inferential model is a potentially powerful one for staff developers if it proves to be accurate." However, the evidence is beginning to point to the fact that coaching, as an instructional technique, does not have the potential to alter teacher behavior as proposed by Joyce and Showers (1981). Not only has this study found that coaching to achieve transfer of training was only moderately effective, other evidence concludes that coaching as an instructional technique may not always be effective. Sparks (1983) found that workshops plus trainer-provided coaching were not superior to workshops alone or to workshops plus peer observation.

Figure 1. Inservice Practices Associated With Above-Average Learning Effectiveness.

Practice	Effect Size
Attempts to increase participants' learning	.90
Federal, state, and university initiated programs	.69
Training groups with elementary and secondary teachers	.67
Participants who were selectively chosen to participate	.76
Self-instruction	.92
Independent study	.98
Strong leadership roles by instructors	.66
Instructional techniques:	
Observation	.81
Micro teaching	.78
Video/audio feedback	.64
Practice	.55

Levinson (1962) suggested that the "psychology of coaching" is an important, yet often neglected consideration, which results in the failure of coaching in the field of management. Levinson cited four reasons that coaching might fall short of its potential as a development technique:

- The coach and the trainee rarely have the "psychological time" to develop the kind of relationship based on mutual respect that is necessary for effective coaching.
- Because there is usually not much tolerance for giving people time to grow, the coaching relationship is often impaired by pressure from superiors to get information from coaches that might be used against the trainee.
- Coaches often do not know how to foster independence; therefore, quick solutions are sometimes proposed that do not fit the complexity of the problem.
- The coaching situation is in danger of being blocked by the universal feeling of rivalry and its accompanying fears.

These potential impediments may be why coaching was only moderately effective in the 225 cases in this meta-analysis. Under some specific circumstances, coaching may be an effective technique, but it does not seem to provide a panacea for staff development programs.

Although these suggestions should guide staff developers, they are only a part of what is needed to provide effective inservice education. Many factors are involved in determining the effectiveness of any given inservice activity. Context issues—such as understanding the school climate; principal support; and adequate resources, including time and an understanding of the needs—should not be underestimated. Nor should process issues such as governance and teacher investment be overlooked.

Nevertheless, the odds for successful staff development can be increased if staff developers consider the factors that have been clearly demonstrated to be related to effectiveness.□

[1]Inservice education and staff development have been used interchangeably to mean any training activity designed to increase the competencies needed by teachers in the performance of their assigned responsibilities.

Highlights of Research on Inservice Teacher Education

A meta-analysis of 91 well-documented studies shows that:

- **Inservice training that includes both elementary and secondary teachers is often more effective than inservice for either group separately.**
- **Inservice is most successful when participants are given special recognition for their involvement, are selected on a competitive basis, or are designated to participate.**
- **Regardless of who conducts inservice sessions (trainers come under many different job classifications), teachers are more likely to benefit when they learn on their own. Similarly, of all the different types of training structures, independent study is the most effective.**
- **There is no magical combination of methods for successful inservice. Nevertheless, inservice programs that use observation, micro teaching, audio and visual feedback, and practice—either individually or in some combination—are more effective than programs that do not use these methods.**
- **There is no evidence that "coaching" greatly enhances instructional effectiveness. At best, it is moderately effective.**
- **Inservice is less successful when participants are regarded as major contributors. Programs are more effective when the leader assumes the role of "giver of information" and the participants are "receivers of information."**

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School Improvement Through Staff Development

GEORGEA SPARKS,
MARSHA NOWAKOWSKI,
BURNIS HALL,
RUDI ALEC,
AND JOSEPH IMRICK

Wayne State University has created a six-step model that improves teachers' skills while increasing their feelings of professionalism.

In recent years, great strides have been made in identifying *characteristics* of exemplary schools—those that are most effective in helping students learn (Purkey and Smith, 1982). However, little research has been devoted to *how* schools become more effective. In a review of research on school improvement, MacKenzie (1983) wrote, "the question of what is important in school effectiveness may now be less significant than the question of what can be changed for the least cost and the most results" (p. 14).

Two Michigan schools have had positive experiences during the three years they participated in the Staff Development for School Improvement project. Both schools were highly successful in raising their test scores, and both attributed these improvements to the staff development project. Another positive outcome has been the institutionalization of the process. In both cases, school improvement efforts have continued even though the university assistance has ended.

The Staff Development for School Improvement Model

In 1981, the College of Education at Wayne State University received a grant from the state of Michigan to initiate a building-level staff development program that would combine the resources of the university with those of the local schools to encourage teacher-directed school improvement. Nineteen elementary and secondary schools began the Staff Development for School Improvement program in 1981; 11 joined in 1982; and six more started in 1983. Participating schools receive approximately $3,000 during the first year, $1,500 during the second year, and $500 during the final year to spend on staff development. The university also provides each school with a facilitator from its staff who guides the school through six steps:

Step 1. Development of Readiness, Awareness, and Commitment. To begin the process, the facilitator meets with the principal and staff until they understand the purpose and the steps in the process. After all questions are answered and concerns addressed, the staff votes on whether or not to participate in the process. If 70 percent of staff members indicate a desire to begin the project, a meeting is scheduled to move on to the next step.

Step 2. Needs Assessment. The facilitator leads the staff through diagnosis, brainstorming, and prioritizing activities to select a school goal. After consensus is obtained on one or two main goals, five or more planning team members are elected to work on the school's staff development plan for that year.

Georgea Sparks is Lecturer, Department of Teacher Education, Eastern Michigan University, Ypsilanti. Marsha Nowakowski is Instructional Leader, Hamtramck Public Schools, Hamtramck, Michigan. Burnis Hall is Associate Professor, and Rudi Alec is Associate Professor, College of Education, Wayne State University, Detroit, Michigan. Joseph Imrick is Principal, Orchard Hills Elementary School, Novi, Michigan.

Step 3. Planning. With extensive guidance from the university facilitator, the staff writes a plan that includes specific objectives related to the goal, activities to be completed, persons responsible for each activity, evaluation plans for each objective, and cost of each activity. The school staff then discusses the plan and approves it. The university project staff also examines the plan and either approves it or suggests modifications.

Step 4. Implementation. At this point the plan is carried out and coordinated by committees made up of staff members. Staff development activities usually include school visitations, workshops, classroom observations, student reward systems, committee work on curriculum, conferences, and materials development.

Step 5. Evaluation. Formative and summative data are collected by the schools and by an external facilitator to monitor progress toward the school goal.

Step 6. Reassessment and Continuation. The facilitator now involves the staff in examining what they have accomplished during the year and what they would like to focus on during the following year. In essence, this is a needs assessment for year two. At this time, one or two members of the planning team are often replaced by other elected staff members so that more teachers have the opportunity to develop their leadership skills. Finally, a new plan is developed for the next year and submitted to the staff and the university for approval. The following year begins with implementation of the new plan.

During the first two years of the process, 82 percent or more of the teachers in each school noted improvements in knowledge, skills, communication, and participation in decision making. The two most commonly mentioned strengths of the program were increased responsibility for the planning of school activities and improved staff morale. Projects were most successful when activities were conducted during released time, when there was little staff turnover, and when district administrators and the principal actively supported the team's leadership role.

Holbrook Elementary School

At Holbrook, a staff of 14 work with approximately 270 black, white, Albanian, and Arab children, 95 percent of whom participate in the government-sponsored free lunch program. The school serves a deteriorating urban neighborhood with high unemployment and many single-parent families.

After 85 percent of the staff voted to participate in the project, the facilitator conducted a needs assessment. The staff chose to review the reading curriculum and investigate instructional methods that would improve student achievement on the Michigan Educational Assessment Test. With the assistance of the university facilitator, the planning team wrote a proposal that incorporated many of the ideas generated by the staff. The plan included three phases: (1) examination of the state assessment objectives and analysis of the reading curriculum, (2) instruction in more effective teaching techniques, and (3) individually designed professional growth activities.

Sam Winternitz

The plan was implemented during the second half of the first year and the entire second year of the project (1981–82). Grade-level teams worked during released time to examine the test format and objectives. The teachers performed a task analysis of the six lowest-scoring objectives to determine the exact learnings necessary to accomplish them. Next, the staff received copies of this information and discussed the implications for classroom practice.

Effective teaching techniques were introduced and practiced at monthly sessions after school. Areas of concentration were teaching to the objective, active participation, motivation, practice, and retention. Each method was practiced in the classrooms between sessions and discussed at the next workshop.

The third part of the Holbrook School plan was to provide a small fund to be used for teachers' self-selected professional growth activities—conferences, workshops, seminars, and visitations. Requests to participate in such activities were submitted to the planning team, and teachers were asked to share their new learnings and materials at regularly scheduled meetings.

After examining evaluations from each activity, adjustments were made. During reassessment, the staff chose to use the same three-phase plan to focus on math during the third and final year of the project, 1983–84.

Holbrook was one of the 19 schools in Michigan to be honored for its increased test scores. On the reading portion of the state test, students performing above the average rose from 72 percent in 1981 to 100 percent in 1983. The staff felt that this increase resulted directly from the staff development project—not from other factors. There were no new programs or staff members in Holbrook School during the three years of the project, nor were there significant changes in the makeup of the student population. Other positive outcomes included improved communication among staff members, higher staff morale, and greater interest in trying new teaching techniques.

As a final benefit, the project created a sense of staff ownership of the school and its programs. Although the project has ended, the Holbrook faculty will continue to use the six-step model for school improvement.

Judy T. Land

Orchard Hills Elementary School

The staff of 22 at Orchard Hills School serves approximately 525 students in a Detroit suburb. The school is well maintained and located in an all-white, middle-class neighborhood.

In spring 1981, Orchard Hills was nominated by the superintendent to participate in the staff development program. Major communication problems existed between the principal and the staff, and student achievement was below the district average. After the staff voted to participate in the six-step process, the university facilitator conducted a needs assessment, which resulted in two main goals—improving communication and developing trust among staff members.

Next, the planning team worked with the facilitator to plan activities to meet this goal. Six half-day workshops were conducted, covering team-building, staff development as a problem-solving tool, organizational structure, effective communication, and conflict resolution. Staff evaluations later indicated that these activities had helped build a more cohesive, mutually supportive staff and helped the principal improve his management and communication styles.

At the end of the first year, the staff decided to spend the next two years focusing on improving teacher productivity and student performance on the state assessment test. To reach these goals, committees were formed to (1) revise the school's mission statement, (2) evaluate the currently used multi-basal reading approach, (3) learn about workshops on effective instruction and teacher expectations, and (4) examine the state test. Four half-day workshops were then devoted to learning about Teacher Expectations and Student Achievement (TESA) and Madeline Hunter's Principles of Effective Instruction. All staff members also worked together to write and modify practice test items for the state test.

As a result of these activities, the staff (1) adopted a new reading series (eliminating the multi-basal approach), (2) revised the kindergarten program, and (3) created a booklet that included practice test items and effective instructional practices for improving student achievement.

In June 1984 Orchard Hills received the district's "Outstanding School" award. Students achieving the reading objectives on the state test increased from 77.6 percent in 1980 to 97.5 percent in 1983. It is possible—but unlikely—that other factors accounted for this dramatic increase. The school staff and community have remained relatively stable over the past few years, and no program changes have occurred other than staff development activities.

Interestingly, the Orchard Hills staff began the six-step process with a great deal of reluctance, due to the communication barriers in the school. After one year in the program, many teachers still resisted the idea; for some of them the workshops on school climate had not yielded a tangible product that they could feel proud of. When the staff began to work together on instructional issues, things began to fall into place. Teachers who had never really known each other were now standing in the corridors discussing committee activities and meeting informally in living rooms and kitchens. With the breakup of old social interaction patterns, staff members created for themselves an atmosphere of collegiality. After three years, the teachers and principal appear to be proud of the visible difference they have made in student learning.

Why Does This Model Work?

This staff development program is based on the premise that classroom teachers can best address their needs by identifying their own priorities and planning collaboratively to meet those needs. The process, however, does not occur in a vacuum. The university facilitator plays a crucial role by helping the staff honestly consider school needs, examine the available options for staff development activities to meet those needs, develop a realistic plan, and implement the plan in a timely and integrated manner. Where this assistance has not been provided in a consistent and competent manner, the six-step process has been less effective. This is especially true at the beginning; often external assistance becomes less necessary as resources for guiding the process are developed within the school and district.

Another critical feature of the model is, of course, money. Many project teachers have said that this was the first time they had been given the responsibility to design and implement anything, let alone the money to do it with! The money provision says to teachers, "We believe you can do something important. Go for it!" The most frequent comment teachers make about the program is that it enables them to be involved in school decisions. This involvement is welcomed like a breath of fresh air.

The biggest lesson we can learn from the Staff Development for School Improvement program is that teachers can be a powerful force for school change when they are allowed to participate in rational problem solving and responsible, widely shared decision making. Boyer (1983) has concluded that one of the most powerful forces for the improvement of American education is the development of teachers' skills and feelings of power and professionalism. Staff Development for School Improvement offers a promising process for developing greater excellence in American schools.□

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School Improvement Is More than *School* Improvement

Fred H. Wood, Robert Freeland, and John Szabo

The Kenmore, New York, school district conducted inservice programs for board of education members, the superintendent, and central office administrators expected to support school-based change.

Education has a long history of major efforts to increase the effectiveness of our programs and instructional practices. The current thrust for school improvement, however, appears to be more on target, differing from past efforts in a number of significant ways (/I/D/E/A/, 1983; Joyce, 1982). For example:

- The target of change is no longer the district or individual staff member but *the school*.
- The primary means of achieving improvement in student learning is not curriculum development but *staff development* for all professional personnel.
- The source of improvements is not just intuitive judgments about interesting educational practices, but *research on effective schools and effective instructional practices*.
- *Planning* is no longer year to year, responding only to immediate needs and problems, but is *proactive, long range, and systematic*.

Essentials for Successful School Improvement

For school-based improvement to make a real difference, however, we need to realize that while the unit of change in education is the school, schools are not independent of a school system. In most districts, the idea that individual schools would, could, or should make the decisions about improvements is alien. Most board of education members, superintendents, central office personnel, and principals are not prepared for, nor do they understand their roles in, a school-by-school improvement effort. Our experience in Kenmore, New York, suggests that school improvement requires comprehensive inservice programs for board members and the superintendent, central office staff, and principals in order to prepare these policymaking and leadership groups to support and guide local efforts.

Kenmore's School Improvement Process

The Kenmore schools serve a community of 150,000 that adjoins the City of Buffalo, New York, as a first ring suburb on the north. This district, long known for its academic excellence, has experienced changes quite similar to those of other urban and inner ring suburban school districts. As more blue collar workers have moved into the district, more affluent and professional families have moved out. There are now more families with no children in the schools (70+ percent), and 60 percent fewer students enrolled in the schools than there were 10 years ago. With the closing of 16 schools, there has been a 40 percent cut in the professional staff. Business

Fred H. Wood is Head, Division of Curriculum and Instruction, Pennsylvania State University, University Park; Robert Freeland and John Szabo are District Facilitators for School Improvement, Union Free School District, Tonawanda, New York.

"We need to realize that while the unit of change in education is the school, schools are not independent of a school system."

failures and reduced assessments have decreased tax dollars, and school budget increases and bond issues have been defeated.

As one might expect, these conditions resulted in low morale and considerable tension among teachers and administrators. It was at this point that the Kenmore School District hired a new superintendent who was committed to school improvement.

With the assistance of staff members at the Institute for Development of Educational Activities (/I/D/E/A/), a private nonprofit foundation in Dayton, Ohio, the new superintendent developed a strategy for increasing the effectiveness of the educational programs and practices in each of the 12 schools in his district. At the heart of this plan was the /I/D/E/A/ School Improvement Process, designed to enable teachers, administrators, parents, students, and community representatives to collaboratively identify goals and plans to improve their school, and then systematically implement their plans.

The school improvement process begins with the selection of a School Planning Team. This team—which includes 15 to 20 teachers, parents, community leaders, a central office administrator, the principal, and (for secondary schools) students—is charged with developing a vision of what it wants the school to be like in five years, establishing specific improvement goals and developing plans for implementation. Team members are also responsible for communicating what they decide and obtaining reactions and additional information from their peers as they move through the planning process.

Once appointed, the planning team meets together on a regular basis and participates in a series of structured experiences that enable them to develop the skills and trust they need to work as an effective decision-making group and to build a tentative vision of what they'd like to see happening in their ideal school. The planning team then meets with five to seven peers (other parents or teachers) to keep them informed of what they are doing and to get reactions or additional data related to their decisions.

Later on, during a two- or three-day retreat, planning team members identify specific goals for improvement and decide which programs and practices they might implement to achieve their goals. Following this goal-setting session, a subgroup of the planning team develops specific one-year and long-term plans for implementing the improvement goals and programs. Their written plan includes details for the first-year inservice program, timelines for implementation, and formative and summative evaluation data. It also includes a strategy for obtaining commitment from the school faculty, central office administrators, and parents. When this design is completed, it is taken back to the planning team for review, revision, and approval.

Christine L. Roberts

"It is quite different from the way most school districts operate, where decisions about major improvements and how to implement those improvements are usually made in the central office."

Now team members, in cooperation with the principal and other administrators, begin to implement their strategy to get faculty support for the improvement plan and to initiate inservice training. Since the overall plan usually covers four or five years, each year the planning team examines progress and develops realistic plans for training and implementation for the next year.

Obviously, this systematic change process requires a trained facilitator to guide a school planning team, not only through the planning stage, but through the staff development, implementation, and replanning stages. In Kenmore, each school had two facilitators—a parent and either an administrator or a teacher. These facilitators were trained by two district facilitators who had been trained by the /I/D/E/A/ staff.

Staff Development to Support School Improvement

While the school improvement process certainly enables schools to plan and implement significant changes in current practice, it also decentralizes decision making. It is quite different from the way most school districts operate, where decisions about major improvements and how to implement them are usually made in the central office. Recognizing this, the Kenmore School District saw an additional need for staff development. The board of education needed to understand the school improvement process and its implications for the way they made decisions. The central office administrators needed to understand what the schools were doing with school improvement and the new roles they and the principals would play in this decentralized approach to change. Finally, since the school was viewed as the unit of change and the principal as the key instructional leader, there was a need for principals to understand the school improvement process and develop the leadership skills necessary to support and guide such a project.

The initial steps included sessions to acquaint building principals and teachers with the school improvement process. These were followed by a two-day workshop where board members, principals, central office administrators, teachers, parents, community representatives, and high school students actually experienced key segments of the /I/D/E/A/ school improvement process.

The School Board. Based on these awareness sessions, the school board developed an understanding of the process that would be used to help their schools increase their effectiveness. The board then affirmed, in a public meeting, its initial commitment and financial support for the district's school improvement efforts.

This commitment and support has been maintained over the last three years. Progress reports and evaluation data about improvement efforts and related training activities for district administrators have been shared. School board members have actually been part of school planning teams. Four schools have formally presented their five-year plans to board members during a regular school board meeting (several others have done so informally). This involvement and communication with the board has resulted in continued funding of improvement efforts.

Central Office Administrators. Most central office staff members were involved in the two-day awareness session and many have also experienced the same training principals received. Under the leadership of the superintendent, central office administrators have met in monthly inservice sessions to develop communications skills, to build supportive working relationships, and to help each other solve problems encountered in their jobs. In addition, these meetings have been used to help central office administrators understand their roles in facilitating school improvement in each school, and to discuss educational issues and problems affecting the district.

The Principals. Early in the district's efforts to move into school improvement, all principals participated in the /I/D/E/A/ principals' inservice program. This program was designed to help build support groups and to develop the problem-solving skills needed to plan and implement improvements in their buildings. After an initial awareness workshop, the principal inservice groups met one day a month during the first year of school improvement to work on planning skills, to help each other solve immediate problems, and to prepare for supporting improvement projects in their individual schools.

During the next stage, principals turned their staff development efforts toward increasing their supervisory skills and focusing on instructional effectiveness. In this inservice, teachers and their principals learned and practiced clinical supervision and examined effective instructional practices related to student achievement.

Assistant principals and a parent in most schools were trained by two central office facilitators to guide their school through the school improvement process. Several principals also participated in this training, and all principals became acquainted with the process through participation on their school planning team.

"Involvement and communication with the board of education resulted in continued funding at a time when the district had other major financial demands."

Problems Encountered

This comprehensive approach to school-based improvement and staff development is difficult to implement. Over the last three years, those in Kenmore who were involved in guiding the school improvement program had to deal with a number of concerns and problems—which other schools will need to consider as they design their own strategies for introducing and implementing improvement projects. Here are some possible problems:

- Principals may not believe that they and their planning team will be given the autonomy to make decisions about their specific school improvement.
- Teachers and principals may believe school improvement implies that someone has judged them or their actions as inadequate.
- Previous experience in many schools with participatory decision making and community involvement may have promised great success but did not work out. Therefore, talk about involving parents and the community will revive old memories of unsuccessful collaborative efforts.
- There may be general resistance to outside assistance. There may be a feeling that "it's easy for you to say or suggest this or that; you don't have to live with the results."
- It may be very difficult to get people to dream or think big when they are focused on the immediate problems in their jobs or on whether their jobs will even exist in the near future.
- Because they believe that time spent on developing group and decision-making skills and staff involvement is time wasted, many of the district administrators may want to jump to immediate solutions for immediate problems.
- Some people may spend their time focusing on what could go wrong or explaining why something will not work.

These are problems and concerns common to any change program. They are also the kinds of problems that /I/D/E/A/ facilitators are trained to address.

Results in Kenmore

Kenmore Schools are now well into their third year of school-based improvement and can identify a wide range of positive results. Each of the 12 schools in the district has completed their vision and planned improvement projects for their school. These plans include goals and programs for improving classroom discipline, designing and implementing curriculum to promote higher order thinking, improving school climate, introducing early intervention strategies to deal with emotionally disturbed students, involving faculty in solving school problems, increasing student achievement in basic skills, promoting more teacher involvement in staff development, and increasing the use of effective instruction practices.

As the result of these accomplishments, we are beginning to identify indicators that suggest that SIP is successful. The teachers organization has been very supportive of the school improvement project and has even proposed funding some school improvement program activities related to clinical supervision. The board of education has also continued to support the school improvement program at a time when funds to operate the district were in short supply. Public statements and testimonials supporting school improvement are becoming more commonplace among teachers and administrators. And most important, parents, teachers, principals, and the community members are showing pride in their schools, their programs, and the students in the district.

Essentials for Success

Based on our experiences, we believe the following are essential to a successful school-based improvement program.

- Schools should have a systematic improvement process that involves students, parents, teachers, administrators, and community leaders in selecting goals, planning programs for improvement, and implementing staff training and on-the-job assistance.
- Schools should have trained local facilitators to guide school staff members through the improvement process, and the assistance of an external consultant to train and assist local personnel.
- The principal, as a key leadership person in school improvement, must learn how to facilitate improvement in the school, particularly in the areas of instruction, shared decision making, and managing change.
- If school improvement is to have any real effect on student achievement, it must include provisions for increasing the effectiveness of classroom instruction.
- The school board and superintendent must understand and be committed to school-by-school improvement. They need to demonstrate their commitment by allocating resources for personnel, time, materials, and training, and by developing policies, procedures, and public statements that support improvement efforts.
- The central office administrators must understand and support school-based improvement. This includes learning the roles necessary to support decision making at the school level, rather than at the district level.

A closing thought: if our experience with school improvement has taught us anything, it is that (1) systematic school-based improvement is not only possible but results in significant benefits to students and staff, and (2) school improvement is more than *school* improvement.□

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LINDY MARWOOD, FRANK MCMULLEN, AND DIANE H. MURRAY

Learnball League: Teacher-to-Teacher Staff Development

For over 20 years teacher volunteers have been showing other interested teachers how to implement Learnball, a classroom management approach that uses a sports format and peer approval to improve productivity, motivation, and behavior.

In 1964, a teacher from Pittsburgh, Pennsylvania, developed Learnball—a classroom management technique to improve student productivity, motivation, and behavior. Using suggestions from other teachers, Earl Bradley designed Learnball to appeal to students because student enthusiasm is a major factor in teacher acceptance of new methods (Parish and Arends 1983). Learnball is a strong educational medicine mixed with just enough sweetener to make it palatable. The medicine is discipline, cooperation, and hard work. Learnball teams are highly cohesive, family-like support groups, which adopt norms that are able to quickly and easily overcome bad habits. The sweetener is a sports format with special modifications (individualized participation and consensus) that appeals to students K-12.

Bradley understood that the success of a new program depends on teachers being able to see immediate improvements in student behaviors. While doing research for his doctoral dissertation, Bradley (1970) also had the foresight to recognize that the teacher is the key to acceptance and implementation of any program (Parish and Arends 1983). When the presenter of a new practice is a successful practitioner, credibility for the program is greatly increased (Crandall 1983). In addition, he knew that teachers are more apt to implement new practices when the program can be quickly and easily implemented, has immediate and enduring results, and provides for support from peers (Guskey 1985).

Bradley developed a dissemination model then that meets today's standards for staff development presentations.

Los Angeles Teacher Center Director Bernice Medinnis, who has introduced Learnball to new and experienced teachers, cites numerous benefits of Learnball.

Increased time-on-task, greater student involvement, and more positive student attitudes have occurred immediately where Learnball is used. Teachers are spreading the word, teaching and supporting each other as they implement the program.

Medinnis reports that there is unprecedented enthusiasm and excitement during presentations and an unusually high percentage of teacher acceptance and implementation. In addition, teachers who use Learnball consistently relate dramatic increases in student motivation and decreases in discipline problems.

A Model for Student Enthusiasm

The Learnball approach uses peer social approval as a reward. A foam ball and hoop are used (very sparingly) to create an appealing sports format. In Learnball, classroom rules become the rules of the sport. This produces immediate, positive behavioral changes, especially in students who have acquired negative habits. This approach harnesses students' interest in peer activities and sports to create enthusiasm for academic learning (Goodlad 1984). Classwork becomes a cooperative team endeavor in which the scholar earns peer esteem for superior effort and the slower student is rewarded for learning attempts. A very important Learnball feature is that all students, regardless of ability, receive learning reinforcement from their peers. Learnball creates many culture-free, gender-free roles for students, and it uses a consensus, problem-solving approach to classroom situations.

Learning Support Groups

Learnball is a strong educational medicine mixed with just enough sweetener to make it palatable. The medicine is discipline, cooperation, and hard work. Learnball teams are highly cohesive, family-like support groups which adopt norms that are able to quickly and easily overcome bad habits. The sweetener is a sports format with special modifications (individualized participation and consensus) that appeal to K–12 students.

Learnball is implemented by following procedures in the Learnball handbook. In the first step the class votes to form learning teams and adhere to a strict set of rules to achieve academic excellence.

Students form two balanced teams because that creates high morale which is the key to productivity. Team leaders are elected because high-status leaders can rally the teams to outperform each other. An assistant teacher, chosen by consensus, helps the teacher. Since students have a voice in the selection, the assistant is not viewed as a "teacher's pet." A student is selected to keep score and others are appointed to handle supplies.

Students and teacher reach a consensus on point values for classroom rules, and compliance becomes part of the learning contest. A motivational counseling technique, combined with individual and group incentives, works to extinguish bad habits and poor behavior.

The Learnball "freeze" is a way to obtain total and instant class attention. Within seconds, the teacher can shift from a class activity involving movement and conversation to a mode where students are seated, silent, and attentive.

As class begins, students focus attention and increase concentration with a "freeze." Teams earn points for being prepared, following directions, completing work, answering questions, participating in learning activities, and following the rules. The Learnball bid system allows high and low academic achievers to be team heroes. High scorers always earn great esteem, but even one point scored by any student can win the contest.

A foam ball is used briefly at the beginning and end of a lesson as a reward for work. Shooting hoops also reduces tension and makes classroom work exciting for those students who normally are not academically motivated.

To show students that they are part of a large peer network, official Learnball League International merit awards are given. League affiliation establishes an even stronger group norm to support the learning program.

Teams select names such as IBM and Apple to draw a parallel between Learnball teamwork skills and cooperation that is essential in the adult work environment.

The Learnball steps work together to produce a gestalt that maintains support groups that motivate through peer approval and a sports approach.

Support from Peers Is Essential

Bradley and his colleagues formed a nonprofit organization to disseminate the model, which evolved into a teacher-to-teacher, self-help network called Learnball League International. The League gives support to teachers through a telephone hotline and a quarterly newsletter. The Learnball implementation handbook is available *only* as part of the League membership to ensure that teachers can receive help from peers, if needed. The League guarantees success and will refund the membership cost if Learnball fails to improve motivation and decrease discipline problems. Indicative of Learnball's strength is the fact that no refunds have been requested since its inception.

The Learnball Handbook

Much of Learnball's acceptance is due to the fact that the handbook makes it easy to implement the technique in three hours or less. The handbook evolved over many years as a result of teacher suggestions. It is a behaviorally stated, "teacher friendly" manual that outlines, step-by-step, how to introduce Learnball to students, elect student leaders, form teams, and reach consensus on classroom rules. It explains how to use the ball and hoop and award points for positive classroom behaviors. When a step requires the teacher to explain a Learnball procedure to students, an appropriate speech is provided. Since Learnball is a management method, the teacher continues to use the same materials and grading system as before. Learnball does not require any changes in curriculum or in how the teacher deals with the subject matter.

Spreading the Word

The League has employed a three-step dissemination plan to inform schools about Learnball. The first step is to identify principals who are supportive of teacher attempts to improve motivation and behavior and who encourage teachers to work together. The League provides such principals with an article about Learnball that appeared in the *Delta Kappa Gamma Bulletin* (Sneed 1983). In the second step, the principals give a copy of the article to teachers and ask for volunteers to implement the program. In step three, the teacher-volunteers present Learnball at a teacher inservice. The presentation guide provided to volunteers by the League is virtually "presenter-proof." The volunteer divides the inservice audience into two teams that engage in a Learnball contest. Questions and answers about Learnball are provided in the presentation guide. This simulation gives teachers information and firsthand experience with Learnball motivation and discipline. Videotapes are available for the presentation, and experienced staff presenters from Learnball League can assist the teacher volunteer, upon request.

Immediate and Enduring Results

Thousands of teachers use Learnball at all ability levels, in high- and low-income areas, in rural, urban, and suburban settings. These teachers report similar immediate and enduring results. Students take pride in doing homework and bring pencils and books to class to help their team. They pay attention, complete more assignments, and enjoy academic success.

The following comment is typical of teachers' reactions:

> I first read about Learnball in late September when my principal circulated the *Delta Kappa Gamma Bulletin* article. I was very much interested because the article offered a solution for the many frustrations that were taking the enjoyment out of teaching. I followed the step-by-step instructions. It was easy and fun to do. Both the cooperation within each team and the competition between teams were evident immediately. I have never seen students so motivated! I sensed a high energy level in the classroom, and that energy was focused on the lesson. Since we began Learnball, student output has increased tremendously because positive behaviors are rewarded continuously. Learnball has exceeded all my expectations!□

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Lindy Marwood is a 5th grade teacher at William Penn School, Elizabeth, PA 15063. **Frank McMullen** is a science teacher at Guest Junior High School, Roseville, MI 48066. **Diane H. Murray** is executive director, Learnball League, P.O. Box 18221, Pleasant Hills, PA 15236.

To obtain more information about Learnball, send a large business-size, self-addressed, stamped envelope to Learnball League, P.O. Box 18221, Pleasant Hills, PA 15236.

THOMAS R. GUSKEY

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Staff Development and Teacher Change

The most significant changes in teacher attitudes and beliefs come *after* they begin using a new practice successfully and see changes in student learning.

Despite differences in context and format, most staff development programs share a common purpose: to bring about *change*. Educators generally agree that the three major outcomes of effective staff development programs are changes in (1) teachers' beliefs and attitudes, (2)

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teachers' instructional practices, and (3) students' learning outcomes (Griffin, 1983). The sequence in which these changes occur has important implications for staff development.

Traditionally, staff development has focused first on initiating change in the beliefs, attitudes, and perceptions of teachers. It was generally assumed that these changes would lead to other specific changes in their classroom behaviors and practices, which, in turn, would result in improved student learning. This traditional model has evolved in large part from the work of early change theorists such as Lewin (1935), who derived many of his ideas from psychotherapeutic models. Current research indicates, however, that the assumptions of this traditional model are inaccurate, at least under the special conditions of staff development for experienced teachers. Therefore, a new model that reexamines the process of teacher change under these special conditions is needed if staff development programs are to become more effective.

A New Model

Staff development efforts concerning new programs or innovations typically set out to gain acceptance, enthusiasm, and commitment from teachers "up front," *prior* to the implementation of a new program or innovation. Often this is done by seeking teachers' input during planning sessions or in some cases, by surveying teachers to ensure that the program is aligned with their needs (Joyce and others, 1976). Certainly teachers should have input in the planning and development of new programs. But, unfortunately, these activities seldom change teachers' attitudes significantly or elicit strong commitment from them (Jones and Hayes, 1980).

An alternative approach is shown in Figure 1. According to this model, significant change in teachers' beliefs and attitudes takes place only *after* student learning outcomes have changed. These changes in student learning result, of course, from specific changes teachers have made in their classroom practices. For example, they might be the result of a new instructional approach, the use of new materials or curriculums, or simply some modification in teaching procedures or classroom format. Whatever the case, this model indicates that significant change in the beliefs and attitudes of teachers is contingent upon evidence of change in the learning outcomes of their students.

It is important to keep in mind that "learning outcomes" in this model are broadly defined to include not only cognitive and achievement indexes, but also the wide range of student affective variables, such as, involvement in class sessions; motivation for learning; and students' attitudes toward school, toward the class, and toward themselves. In other words, learning outcomes include whatever evidence teachers use to judge the effectiveness of their teaching. According to the model, when teachers see that a new program or innovation enhances the learning outcomes of their students, then, and perhaps only then, is significant change in their beliefs and attitudes likely to occur.

Supporting Evidence

Support for this new model of teacher change comes from a variety of sources. For example, recent ethnographic studies show that new ideas and principles about teaching are believed to be true by teachers only "when they give rise to actions that 'work'" (Bolster, 1983, p. 298). This research indicates that experienced teachers seldom become committed to a new program or innovation until they have seen that the new practices work well in *their* classrooms with *their* students.

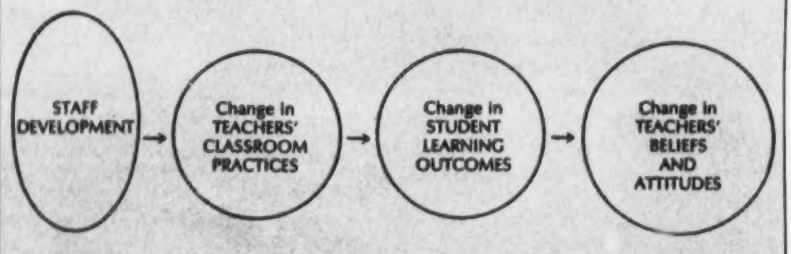
Similar results have come from studies on efforts to disseminate new projects and programs. In an investigation that examined 61 innovative programs in schools and classrooms in 146 districts nationwide, Crandall and associates (1982) found that attempts to alter teachers' attitudes and foster commitment to new practices prior to implementation were generally unsuccessful. In most cases, teachers became committed to the new practices only *after* they had actively engaged in using them in their classrooms (Crandall, 1983).

Still further support comes from recent studies of the separate effects of inservice training, use of new instructional practices, and evidence of improved student learning on teachers' beliefs and attitudes (Guskey, 1979, 1982, 1984). In the most recent of these investigations (Guskey, 1984), a large group of teachers was trained in the use of mastery learning procedures (Bloom, 1968, 1971). Following the training, most of these teachers used the procedures in their classes and saw improvements in their students' learning. However, a few teachers used the new procedures and noted no improvements, while some never tried them out. Those teachers who did see improvement became more positive in their attitudes toward teaching and expressed increased personal responsibility for their students' learning. They liked teaching more and felt they had a more powerful influence on learning outcomes. These changes did not occur among the teachers who used the new procedures but saw no strong improvement, nor among those who were trained but never attempted implementation. Thus, neither training alone nor training followed by implementation were sufficient conditions for change. These particular belief and attitude changes occurred only when training and implementation were combined with evidence of improved student learning.

Implications for Staff Development

Based on this new model, there are three important principles to consider

Figure 1. A New Model of Teacher Change.


STAFF DEVELOPMENT
Change in TEACHERS' CLASSROOM PRACTICES
Change in STUDENT LEARNING OUTCOMES
Change in TEACHERS' BELIEFS AND ATTITUDES

Thomas R. Guskey is Associate Professor, College of Education, University of Kentucky, Lexington.

when planning and implementing effective staff development programs.

1. *Change is a slow, difficult, and gradual process for teachers.* Although teachers generally want to do all they can to improve student learning, most oppose innovations that require radical alterations in their instructional procedures. The likelihood of their implementing a new program or innovation depends largely on their judgment of the magnitude of the required change. Programs or innovations that are dramatically different from current practices or that require teachers to make major revisions in the way they presently teach are unlikely to be implemented well, if at all (Doyle and Ponder, 1977). To be successful, staff development must clearly illustrate how the new practices can be implemented without too much disruption or extra work (Sparks, 1983). Changes required of teachers should be organized and presented in small, incremental steps, and they should be described clearly and explicitly with emphasis on efficiency and practicality. Furthermore, it is best to begin with changes that are relatively modest but that can result in demonstrable student improvements in a fairly short period of time.

2. *Teachers need to receive regular feedback on student learning outcomes.* Practices that are new and unfamiliar will be readily abandoned unless evidence of their positive effects can be seen. Therefore, procedures by which teachers can receive evidence of their efforts must be planned. In programs involving the implementation of mastery learning, teachers receive feedback through the regular administration of "formative tests" (Bloom, Madaus, and Hastings, 1981). These tests give students detailed information on their learning progress and, when paired with corrective activities, help students remedy their learning errors. But they also give teachers specific feedback on the effectiveness of their use of the mastery learning process by clearly illustrating improvements in student achievement. Formative tests can be used to guide instructional revisions as well (Guskey, 1985).

Stallings (1980) found that providing teachers with regular and precise feedback on student involvement during class sessions can also be powerful in facilitating new instructional practices. Evidence on students' feelings of confidence or self-worth can also serve this purpose (Dolan, 1980). Thus it is critically important that change efforts include some procedure for giving teachers regular feedback on learning outcomes. When teachers see that a new program or innovation works well in their classrooms, change in their beliefs and attitudes can and will follow.

3. *Continued support and follow-up are necessary after initial training.* Few teachers can move from a staff development program directly into the classroom and begin implementing a new program or innovation with success. In most cases, some time and experimentation are necessary for teachers to fit the new practices to their unique classroom conditions (Joyce and Showers, 1982). This fitting process is referred to as "mutual adaptation" (Berman and McLaughlin, 1978) and is essential for successful implementation. Support during this period of trial and experimentation is critical. Teachers need continuous guidance and direction in order to make adaptations while maintaining program fidelity. Furthermore, they need to know that assistance is readily available if problems or unexpected difficulties develop and that occasional failures are tolerable (Cogan, 1975).

This crucial support for teachers can be offered in a variety of ways. Joyce and Showers (1982) suggest using "coaching" to provide teachers with technical feedback, guide them in adapting new practices to the needs of their students, and help them analyze the effects on students. Coaching is personal, hands-on, in-classroom assistance that can be provided by administrators, curriculum supervisors, college professors, or fellow teachers.

In addition, new programs and innovations have been found to be most successful when teachers have regular opportunities to meet to discuss their experiences in an atmosphere of collegiality and experimentation (Little, 1981). For most teachers, having a chance to share perspectives and seek solutions to common problems is extremely beneficial. In fact, what teachers like best about inservice workshops is the opportunity to share ideas with other teachers (Holly, 1982).

Follow-up procedures incorporating coaching and collegial sharing may seem simplistic, particularly in light of the complex nature of the change process. Still, as the new model suggests, careful attention to these types of support is crucial.

Conclusion

The new model for teacher change offers a variety of opportunities for future research in each of its components and in the transition between them. For example, we need to find more creative ways of prompting teachers to initiate changes in their classroom practices. Better and more efficient methods of providing teachers with regular feedback on the learning progress of their students also need to be identified. The specific teacher beliefs and attitudes most crucial to their professional growth and development need to be explored and better ways of measuring these variables need to be found. Studies on these issues offer exciting possibilities. In addition, their findings are likely to have implications for staff development efforts at all levels of education.

Most important, the new model offers a very optimistic perspective on the potential of staff development. It illustrates that the process of teacher change is orderly and that such change *can* be facilitated. By carefully considering the critical aspects of the change process, staff development programs can become far more effective and far more powerful.□

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Topic H

The Supervisor as a Researcher and Member of the Profession

SUPERVISORS ARE RESEARCHERS AS WELL AS CONSUMERS OF research. One of their responsibilities is to conduct research to determine the effectiveness of their programs. Even more frequently, they interpret research findings related to all phases of the instructional program and translate conclusions into specific recommendations for improvements in local school practices. As consumers of research, they must be aware of the work of various regional educational laboratories, research and development centers, and independent researchers. They should avail themselves of the services of the Educational Resources Information Center (ERIC) and other data retrieval systems. Supervisors also encourage teachers and other staff members to engage in experimentation in search of more effective procedures for classroom instruction and school management. These latter activities are often described as action research.

The research-related articles chosen for this topic are not reports of experimentation, nor are they efforts to disseminate the results of research. They are, instead, articles which focus on the researcher and the strengths and limits of research methods.

In "Who is Right—Madeline Hunter or Art Costa?", Lambert draws from her own research on the beliefs and intentions underlying researchers' and policymakers' views on staff development to remind the reader that to understand researchers is to understand the policies they promote and the lines of research they follow. Although she views Hunter and Costa as "archetypes at opposite ends of the spectrum," Lambert believes that the metaphors they have used to describe learning are "not so dissimilar." The insights supervisors gain from Lambert's article help them gain perspective about researchers as persons and also suggest implications for staff development and other work with adults in the schools.

In two closely related articles, "The Trees or the Forest? A Response to Ruth Wade" and "Ruth Wade Replies," two researchers, Sparks and Wade, interact about Wade's research and the research method, meta-analysis, which she used. The interaction begins with Sparks' response to an earlier article by Wade, "What Makes a Difference in Inservice Teacher Education? A Meta-Analysis of Research." Her own familiarity with meta-analysis causes Sparks, as the critic, to "worry that the technique may distort the variables being studied." Other concerns she identifies include the use of terms which are open to interpretation and the lack of descriptive information on the 91 studies used in Wade's meta-analysis. In the companion article Wade replies to Sparks' criticisms. The reader is encouraged to return to Topic G in this book and review Wade's article before reading Sparks' reaction and Wade's reply.

A wealth of school effectiveness research has prompted widespread recognition of the importance of instructional leadership. As a result, supervisors must, as professionals, be concerned about their own personal effectiveness and the effectiveness of the delivery system for their services. They must approach evaluating supervision and supervisors with the same vigor they display in their approach to evaluating teaching and teachers. One article in this section serves to focus the reader's attention on the evaluation of principals.

Murphy, Hallinger, and Peterson focus on the superintendent's role in "Supervising and Evaluating Principals: Lessons from Effective Districts." They describe the supervision process as "almost totally oral and visual" and the evaluation process as "characterized by a high degree of 'rationality'." In conclusion, the authors identify several characteristics of supervision and evaluation processes of principals in effective school districts. The reader will find the procedure can be applied to other classes of supervisors.

The final article, "On Being Not Quite Ready to Retire," accentuates the rewards experienced by one professional who has spent 28 years as a teacher, counselor, and administrator. Countless educational leaders will be able to identify with Eleanore Fisher, whose article ends this book on a high note.

The following questions and activities may stimulate discussion and action.

1. What are the implications of the Lambert article for supervisors?

2. What is the major contribution of the Wade-Sparks-Wade sequence of articles to your understanding of meta-analysis as a research tool?

3. Reflecting on the mechanisms for evaluating the principal's performance discussed by Murphy, Hallinger, and Peterson, identify a mechanism you would employ to evaluate supervisors.

4. Interview an experienced or retired supervisor to talk about the rewards and "drawbacks" of supervision as a career. Compare your findings with the observations by Fisher. What agenda would you offer to address those "drawbacks" identified both by your interviewee and by Fisher?

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Who is Right—Madeline Hunter or Art Costa?

By understanding the researchers we can better understand the policies they promote and the lessons they plan for others.

LINDA LAMBERT

In the 1984 ASCD Yearbook, *Using What We Know About Teaching*, Madeline Hunter and Art Costa tee off on the nature of knowing and the elements of teaching and learning. Hunter presents in articulate detail her work in classroom instruction, which has made her today's foremost authority on that topic. Costa challenges the scientific reductionism that quantifies and sequences teaching as a predictable step-by-step process. When Hunter labels intuition as "sterile" and "inarticulate," Costa reminds us that intuition provides scientists new insight and creativity and that intuition can be "on call."

Do Hunter and Costa not understand each other, or do they understand each other too well? What makes them hold so fast to their opposing views?

In an interview study (Lambert, 1983), I examined the beliefs and intentions underlying researchers' and policymakers' views on staff development. Participants included such leading educators as Bruce Joyce, John Goodlad, Ralph Tyler, Jane Stallings, Elliot Eisner, Delmo Della-Dora, and Paul Berman, among others. In this study of adult learning, Hunter and Costa—archetypes at opposite ends of the spectrum—helped provide an understanding of what directs their actions, the research questions they pose, the learning they plan for others, and the policies they promote. Learning style was a primary factor. Other factors included how they differentiated themselves from others, and their drive for cognitive consonance, meaning, and purpose.

Hunter, who tends to be more sequential, rational, and field independent in style, sees the world very differently from Costa, who is holistic, experiential, and field dependent. The comments in Figure 1 reflect the different learning styles of several researchers.

Understanding these differences in learning style is critical to understanding how learning experiences are designed for others. In Figure 2, I have clustered together different staff development approaches based on the preferences of the study participants.

Obviously, these categories are not discrete nor all-encompassing. Many

Figure 1. Comments Reflecting Different Learning Styles.

Sequential, Modular

Madeline Hunter: "I break it into small meaningful pieces, pull out the key concepts, check to see whether I know that before I move on."

Holistic

Art Costa: "I'll take a look at the whole thing and I'll think about it a long time and then everything will just fall into place together."

Field Independent

Jane Stallings: "I'm more of a looker, a listener; my style is that I observe . . . I think growing up reading a lot makes you a little more introspective."

Field Dependent Experiential

Art Costa: "Once I've done something experientially and have talked about it and solved the problem, then I can talk about it, read about it, give meaning to the experience."

Rational, Logical

Madeline Hunter: ". . . present them with evidence that would cause them to question their own point of view. I think you're convinced by your brain, not by your emotions."

Intuitive

Karen Kent: "I have developed an intuitive ability over and above what I used to have. I've really started paying attention to that."

Linda Lambert is Principal Consultant, The Principal Center, Marin County, California; researcher, Berman & Weiler Associates, Berkeley; and Adjunct Professor, San Francisco State University.

Figure 2. Staff Development Approaches Reflecting the Learning Styles of Study Participants.

Staff Development Approach	Learning Style	Participants
school improvement collaborative	field dependent experiential	Goodlad, Joyce, Riles, Bond, Miller, Della-Dora, Lambert, Roberts, Berman, Bundy, Eisner, Tyler, Hart
problem-solving instructional methodology product-oriented teacher-center teacher-advisor (as personal growth models)	holistic sequential field independent rational, logical holistic field independent experiential intuitive	Hunt, Scrofani, Knight, Horan, Choye, Guilkey, Tyler, Mesa, Stallings Kent, McCaffree, Galagaran, Lambert, Costa, Joyce, Roberts, Berman, Vasconcellos

of the participants in this study understand the bias to a particular style and actively seek to broaden the base for learning to accommodate other styles. For example, Hunter immerses her instructional methodology in an approach that includes support, interaction, coaching, and feedback. Stallings includes a research foundation joined by support, opportunities to analyze discrepancies, interaction, and peer observation and feedback. Many who advocate a school improvement approach, such as Goodlad, Eisner, and Della-Dora, also include the instructional methodology approach.

An important distinction is that, despite the accommodation for alternate styles, the focal point of the sequential (modular) approach is an established authority base (in this case, research). The group concensus, problem solving, or inquiry models (school improvement) begin with the ideas of the participants—derived from experience, purpose, and meaning within a given mileau. This is the critical difference between the two. The "personal growth" models are similar to the school improvement, although focused on the renewal of the individual rather than the institution.

More intriguing, despite the divergence in their own styles and therefore the learning that they designed for others, participants shared a common vision of what the learning experience could be. Each was asked to provide a metaphor that captured his or her thoughts about adult learning. Hunter found learning to be like a bird flying: "a way of loosening your constrictions and making you free." Costa saw learning as an "ever-expanding universe," growing and liberating in its process. Not so dissimilar. Perhaps it is in their vision of what learning can be that the meaning of teaching and learning can be negotiated.

The fertile field between Hunter and Costa should be tilled by joint effort. Leaders in staff development need to search for a consensus on the direction of staff development through critical discourse that recognizes the validity of various approaches to teaching adults. For the way to best do this lies neither solely with Hunter or with Costa—but with both.□

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The Trees or the Forest?
A Response to Ruth Wade

GEORGEA M. SPARKS

I was pleased to be asked to respond to this article because I recognize the need for research that will help us design more effective inservice programs. Although I'm convinced of the need for meta-analysis as a tool for integrating the findings of related studies, I worry that the technique may distort the variables being studied. This distortion is not the one that we as social scientists are often accused of—missing the forest for the trees. Rather, without enough accompanying detail and clarification of variables, meta-analysis can result in our missing the trees for the forest.

My concern comes from direct experience. I was part of a research team that conducted a meta-analysis of 153 studies comparing open education with traditional instruction (Hedges, Giaconia, and Gage, 1981). In that project we each read five to seven original studies every week, noting in detail the definition of independent and dependent variables, interventions that were used, the samples described, important context variables, and so on.

The labels given to independent and dependent variables in a study are often inaccurate representations of the actual practices or skills being manipulated or measured. A label may mean one thing in one study and something entirely different in another. We also found that abstracts and reviews of the studies provided so little information about a variable that it was difficult to interpret or use the findings. My lesson was that meta-analysis can be a useful tool if research reports are carefully examined to be sure that the studies being grouped together have defined and measured their most critical variables in the same ways. Otherwise, it can be a very risky business.

Ruth Wade (pp. 48) indicates that she read "many" of the 91 studies in her meta-analysis to determine the common independent variables. This worries me. If only a few were read in detail, how do we know how the variables were defined—how they actually looked in practice? After all, the purpose of meta-analysis is to enable us to know what works best. But when the critical variables are defined so briefly that it is hard for us to imagine them in practice, then how useful is the information? Worse yet, we may create our own definitions of the practices found to be most effective and make decisions that contradict the findings of the original studies.

An example will illustrate this point. One finding of the meta-analysis was

A useful follow-up to Wade's meta-*analysis would be a* micro-*analysis of the various studies to provide much-needed detail and clarification.*

Georgea M. Sparks is Visiting Lecturer, Department of Teacher Education, Eastern Michigan University, Ypsilanti.

"Meta-analysis can be a useful tool if research reports are carefully examined to be sure that the studies being grouped together have defined and measured their most critical variables in the same ways."

that "programs developed, initiated, or funded by the state or federal government or a university were significantly more effective than those initiated within the school, either by teachers, administrators, or supervisors." Recommendation 2 (which was based on this finding) reads as follows: "Encourage teachers to become involved in state-, federal-, or university-initiated programs." Obviously the terms "developed," "initiated," and "funded" can describe very different phenomena, but Wade lumped them all together in her recommendation as if they were identical variables.

One conclusion that can be drawn from this meta-analysis is that teacher involvement in projects initiated at the school site is ineffective and a waste of time. But is that what the studies really say? Could this finding have occurred because the variable of "funding" is so powerful that it washes out the effects of other factors, such as who initiates or develops the project? There is no way to investigate competing explanations for this finding because references for the original studies are not provided. Nor is there a reference to an available document that would provide such information.

It would have been helpful if Wade had included a figure describing the 91 studies, including author, date, sample, independent and dependent variables, and a brief description of the inservice program studied. If this was not possible due to space limitations, she could have provided a source for this information, as other authors of meta-analyses have done (see Walberg, 1984).

Duration

I'd like to make two points about Wade's finding that the number of hours or months spent in inservice training seems to be unimportant. First, the total amount of time may be less important than how that time was distributed. If, for example, a third variable were introduced—the number of hours per session—we may have found that more frequent, shorter sessions were superior to fewer, longer ones. Perhaps longer, less effective programs negated shorter, more effective ones when they were averaged together.

My second point relates to how the content or goals of inservice programs may influence program duration. In a previous analysis of several studies of inservice education, I reported that significant positive effects occurred after only a relatively short amount of training time (two half-day workshops) in Evertson's Classroom Management Training (see Mohlman, Coladarci, and Gage, 1982). My experience with Stallings' Effective Use of Time Training (Stallings, Needels, and Stayrook, 1979), however, indicates that five or more half-day workshops may be necessary for teachers to show significant changes in certain behaviors. The difference between the two programs is in the amount and complexity of the new practices being learned. It makes sense that complex, unfamiliar prac-

"I am not convinced that coaching is as ineffective as the findings of this meta-analysis might suggest."

tices will take more time to learn than will simple, familiar ones.

I don't think we should conclude that the amount of time that teachers spend in a program is inconsequential, although that seems to be Wade's finding. Other factors, such as the distribution of time and the goals and content of the workshops, should be taken into consideration.

Instructional Techniques

My greatest concern is about the findings related to inservice instructional techniques because the terms used are open to interpretation. Because no details are provided to help us understand what is meant by observation, coaching, modeling, or mutual assistance, it is difficult to translate the findings into practice.

One of the techniques Wade found to be associated with lower effect sizes was *discussion activities*. But discussion can occur in at least two ways: (1) unstructured, unfocused, rambling talk, which is often unproductive; and (2) structured small-group problem solving, which has been shown to be highly effective (Stallings, Needels, and Stayrook, 1979).

In the Stallings' Effective Use of Time workshops, the groups are small (eight or fewer), and a leader keeps the teachers focused on solutions to the problem at hand (for example, how to get class started immediately after the bell rings). The workshop leader does not allow anyone to dominate the discussion, nor does he or she allow the discussion to degenerate into a "gripe session." Clearly, the learning that occurs in this situation is vastly greater than it would be in a less structured discussion. Further, we should remember that in at least one survey of teachers' attitudes toward inservice activities, the overwhelming favorite was "sharing ideas and techniques with other teachers" (Holly, 1982).

It would be a shame to exclude discussion activities from workshop activities, as Wade has recommended. Again, we need to know more about the studies that were included in this analysis. Did they provide opportunities for productive, solution-oriented discussions? The low effect size may have occurred because these two very different types of activities were averaged together, cancelling each other out.

The fourth highest effect size in this meta-analysis was produced by *observation of classroom practices*. Again, it would be helpful to have a description of how observation occurred in the studies analyzed. Were teachers trained in observation processes? Did teachers use observation instruments? Was participation voluntary? What did teachers do after the observation to help them reflect on what they saw?

In my recent study of teacher behavior changes after participation in Stallings' Effective Use of Time Workshops (Sparks, 1983), one training group received only four weekly workshops. Two groups received the workshops and between-session observations. Participants in one of these groups conducted two peer observations with seating-chart instruments that focused on student off-task behavior and teacher-student interactions. The trainer "coached" the third group on two occasions, using the same instruments and post-conferences. All teachers in the peer observation group reached the criterion level on the major observation variables, whereas only a few in each of the other groups did.

Although this study clearly supported the value of providing teachers opportunities to observe each other in a nonthreatening setting, I am not convinced that coaching is as ineffective as the findings of the meta-analysis might suggest. First, it's important to consider who the coach is. It is possible that in my research the trainer was perceived as an outsider who would disappear at the end of the study. The effect of a colleague who would be on-site continually to help with implementation might be quite different. Second, the need for a coach may depend on how foreign to the teacher's normal style the new practices are. Wade does not provide these details, so there is no way to examine these questions further.

"While this meta-analysis provides insight into what factors make a difference in inservice education, there is still much work to be done in this area."

Comments on the Recommendations

I agree with most of Wade's recommendations. Both experience and research support the value of including elementary and secondary teachers together; offering incentives; providing opportunities for independent study; setting clear goals; and using observation, micro-teaching, practice, and feedback. However, I would not discourage teachers from becoming involved in school- or district-initiated programs (Recommendation 2) given the evidence of success of the effective schools and school improvement programs (Eubanks and Levine, 1983; Wood, McQuarrie, and Thompson, 1982).

Wade's suggestion that the leader rather than the participants take on the role of designing and teaching the class (Recommendation 5) deserves a caution. Wade related this finding to the lower effect sizes produced by teachers teaching each other, group work, and discussion sessions. I hope this recommendation won't be interpreted to mean that teachers should never get together in small groups to perform highly structured tasks (designing and performing a lesson, brainstorming ideas, and so on) or that group discussions are never a good idea. Although discussion activities are discouraged in Recommendation 6, I know from experience and research that when teachers are involved productively in group sharing and problem-solving activities, they learn a great deal that can be taken back to their classrooms and used immediately.

In fact, the inservice strategies Wade recommends (observation, micro-teaching, feedback, and practice) all provide one thing that many of us would agree makes the most difference in teacher improvement—a way of looking at and analyzing teaching. These strategies provide opportunities for teachers to experiment with new practices to see how they work. In short, they encourage teachers to reflect upon their own teaching. Often, this reflection is best done with a colleague or in a small group.

While this meta-analysis provides insight into what factors make a difference in inservice education, there is much work to be done in this area. We have the "forest"—the major findings—but we lack an understanding of the specific, practical details that will allow us to apply the results. A productive follow-up to this research would be a micro-analysis of the studies included in each category to determine what made the practices more or less effective (see Giaconia and Hedges' 1982 micro-analysis of more- and less-effective features of open education programs). The next phase is to step up closer so we can see the trees within the forest.□

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Ruth Wade Replies

RUTH K. WADE

Sparks' response demonstrates a clear understanding of my article and an awareness of the caveats to be observed in its interpretation. I am pleased that she was given an opportunity to raise several important issues and that she, in fact, agrees with most of my conclusions.

Meta-analysis can overlook effective techniques, because categories are predetermined. Subtle differences in techniques or methods are often obscured if they fall within the definition of a particular variable. However, if a carefully defined technique or method shows up as significantly effective, you can be sure of its general effectiveness because meta-analysis detects robust effects. Consequently, meta-analysis provides a good way of testing the robustness of broad claims regarding the effectiveness of specific techniques or methods. When these broad claims are not confirmed, then it is time to go back and do the micro-analysis Sparks suggests in order to find out under what circumstances a specific technique or method may or may not be effective.

However, Sparks appears to misinterpret several points. All of the 91 studies were, in fact, read in their entirety. I commented that "I initially read many of the selected studies to determine the variables that were frequently represented in this body of literature." This initial reading was followed by a thorough reading of each study. Likewise, Sparks seems to think the independent and dependent variables in this study were not carefully defined and that variables that were grouped together were perhaps not defined and measured in the same ways. For example, she assumed that I combined programs that were developed, initiated, or funded by the state or federal governments or a university. In fact, they were not lumped together in the study. Only in my summary of the study were they combined, because the effect sizes were quite similar. All variables studied were carefully and somewhat narrowly defined. Only those practices that fell within the established definition for each variable were included.

For a complete listing of the references for the 91 studies, the independent and dependent variables studied, the variable definitions, and the weighting system used to ensure an accurate measure of effect size, see Wade (1984). Space limitations did not permit inclusion of many details in this summary article.

Finally, Sparks mistakenly seems to believe that I recommended excluding discussion activities from workshops. I state that discussion, as an instructional technique, was associated with lower effect sizes. Throughout my paper I was careful never to suggest what not to do. Rather, my suggestions were meant to encourage those practices that I found to be significantly above average in effectiveness.

I appreciate Sparks' insightful and helpful commments. She and I agree that a number of important issues have been raised through the meta-analysis. The next step is to look at the major findings in order to shed more light on the intricacies of inservice education.□

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Supervising and Evaluating Principals: Lessons from Effective Districts

Districts with excellent student achievement have superintendents who are personally involved in supervision and evaluation of principals.

JOSEPH MURPHY
PHILIP HALLINGER
KENT D. PETERSON

This article is a condensed version of a paper presented at the American Educational Research Association annual meeting, Chicago, April 1985.

Much progress has been made in upgrading the quality of teacher supervision and evaluation over the last ten years in both the procedures used in supervision and the substance of the evaluation process. Improvements in procedures have been fostered by research on effective change and implementation strategies (Fullan, 1982). Many substantive improvements in teacher evaluation techniques are directly attributable to research on teacher effectiveness (McGreal, 1983; Medley and others, 1984).

While teacher evaluation is evolving from a perfunctory or ceremonial process to an in-depth, meaningful vehicle for instructional improvement, principal evaluation remains substantially unchanged. It is today more primitive than teacher evaluation was before the advent of teacher effectiveness research for two reasons. First, whether useful or not, most teachers received at least some form of regular evaluation for some "symbolic" purpose. Many principals, on the other hand, are neither supervised nor evaluated on a regular basis. Second, although teachers may have been masters of their own classrooms, it was likely that they would have some on-the-job visits from the principal. Again, this is often not the case for principals, most of whom are geographically separated from central office personnel. Studies on the work activities of principals and superintendents (Hannaway and Sproull, 1979), research on central office coordination and control of schools and principals (Peterson, 1983), and our own experiences in schools and districts suggest that principals are infrequently supervised or even contacted.

This infrequent contact has become an important issue as a result of increased attention to the role of the district office in promoting school improvement (Cuban, 1984; McCormack-Larkin and Kritek, 1982; Rowan, 1983). Many school districts have begun to implement improvement programs that draw heavily on the results of research on effective instruction and effective schools (Farrar and others, 1983). Principals are expected to become the linchpin in these efforts to improve curricular and instructional leaders in districts where maintenance of the status quo had previously been the norm (Hallinger and Murphy, 1982). Yet there is a lack of agreement as to which methods are the most appropriate for organizing district-level improvement efforts (Cuban, 1984) and insufficient evidence to determine which perspective—top-down or bottom-up—is correct, or under what school or district conditions. We need to examine more closely the interactions between district office administrators and principals, particularly with respect to the supervision and evaluation of principals in successful change efforts.

As part of a recent study we examined the supervision and evaluation of principals in effective school districts in California. Our interest in these effective districts was threefold: (1) to search for characteristics or factors related to district effectiveness, (2) to examine the leadership activities of superintendents, and (3) to determine the way district offices attempt to coordinate the work activities of principals. Related to supervision and evaluation of principals, we wanted to review and catalogue supervision and evaluation procedures, describe the role of superintendents in these two processes, and examine how the two functions might work to build linkages between the central office and individual school sites and principals.

Given the concern for educational effectiveness, it is surprising how little attention has been devoted to district-level processes generally and to the role of the superintendent specifically in promoting effectiveness (see Bridges, 1982; Rowan, 1983). One of our goals, therefore, was to develop a better understanding of the district role in effective education. We also wanted to expand our knowledge of the ways districts coordinate and control principals. To accomplish both objectives we combined empirical and conceptual descriptions of effective schools and districts (Murphy and others, 1984, 1985) with the work of

"Each of the sample districts had well-established procedures and clearly defined criteria for assessing principal performance."

Peterson (1985, 1984) on the ways districts coordinate and control the work of principals. The result was a framework of ten control functions.[1] We derived the content for each function from the effectiveness and control literature. In this article we report on two of the key functions—the *supervision* and *evaluation* of principals.

Twelve districts participated in the study—four unified, three high school, and five elementary districts—selected from over 1,000 California school districts on the basis of consistent excellence on student achievement scores. Our first step was to conduct interviews with the superintendents of these districts.

Supervision of Principals in Effective Districts

In all but the two largest districts the superintendent was personally responsible for supervising and evaluating principals. All 12 superintendents were very active in visiting schools. The range of visits was from a low of 45 to a high of 875 visits per year across all schools in a district. Superintendents on average reported spending 21 full (eight-hour) days per year, or approximately ten percent of the total work year, on school campuses. It is important to note that both the number of visits made and the amount of time spent on-site by these superintendents were substantially greater than those found in a random sample of elementary school districts in one state (Peterson, 1983). While superintendents relied on both planned and impromptu visits, they reported that, more often than not, site personnel did not know when they would be visited.

As part of the supervision process, superintendents met regularly with individual principals, usually between three and six times per year. Additional meetings between the superintendent and principals to discuss specific problems or review the superintendent's observations after site-level visits were also frequent. For example, seven of the superintendents reported meeting individually with each principal in the district more than 25 times each year. They also relied on group meetings of principals to control principal activities, check progress on school and district goals, and communicate important norms and expectations.

How important were their visits in the supervision of principals? Ten of the 12 superintendents rated the visits as very important and one as fairly important. Visits are a critical component of the supervision and evaluation of principals, and the two functions are key components in the coordination and control of schools and principals by superintendents. We believe it is significant that superintendents in these effective districts generally took direct charge of these functions.

The supervision process was almost totally oral and visual. Superintendents did not use standard forms to record impressions and judgments, and only a few reported that they wrote notes to principals following supervisory visits.

Superintendents performed three different sets of activities as they visited schools.

First, the superintendents engaged in *review* activities, such as:

- *Review of curriculum and instruction*. A number of superintendents reported checking to see if teachers were instructing to district-approved objectives. Six reported that curriculum and instruction review was the primary purpose of their visits. Four of them said it was a critical activity. This factor is important because other studies of superintendents and districts have found only minimal coordination of curriculum and instruction by the district office (see especially Hannaway and Sproull, 1979).
- *Facilities review*. Superintendents devoted much attention to inspecting the condition of school facilities; for example, the functioning of the plant, condition of the grounds, and degree of student care of the plant.
- *Perception checking*. Superintendents tended to receive considerable information about the operation of district programs and school site activities. Because much of this data was "soft," qualitative, and usually nonquantifiable (a report from a parent about a school condition), superintendents regularly used site visits for verification.

A second set of activities we label *culture-building*, including:

- *Communication*. Generally superintendents tried to be available to speak with staff members during their visits and sought out particular members to provide recognition for successes or to follow up on specific problems.
- *Team building*. Superintendents

"[Superintendents] appear to be key agents in linking school and district offices, a linkage not commonly reported in other studies."

consistently mentioned developing common work groups, showing concern, building morale, and reducing "bureaucratic buffering" as reasons for their school visits.

- *Problem resolution*. As the person at the top of the organization, the superintendent is often able to cut through red tape and secure rapid solutions to problems.
- *Knowledge building*. All superintendents reported that staying on top of current information was critical to their roles. Site visits were viewed as an important avenue for collecting and testing such information and developing a personal understanding of district problems and successes.

The superintendents also engaged in two types of *supervisory* activities:

- *Role modeling*. By this method superintendents communicated directly to principals what they believed were the important aspects of school district management. Three important behaviors modeled by superintendents were (1) administrative interest in classroom activities, (2) high-visibility leadership, and (3) knowledge of and interest in curriculum and instruction.
- *Direct supervision*. Through this process superintendents communicted their view of the principals' effectiveness. Information gleaned during visits was used to assess the quality of a principal's performance. In actuality, direct supervision in these districts was a type of formative evaluation.

Evaluation of Principals in Effective Districts

Principal evaluation processes were characterized by a high degree of "rationality." In many districts principal evaluations are either nonexistent or perfunctory, episodic, and nonsubstantive. However, each of the sample districts had well-established procedures and clearly defined criteria for assessing principal performance. The evaluation content generally focused on yearly school or principal objectives. Progress on yearly objectives was the key factor in evaluating principals in seven of the districts. For principals in the remaining five districts, yearly objectives were an important part of the evaluation process and were used in conjunction with expectations written in final evaluation forms and job descriptions.

Evaluation procedures included:

1. A formal, beginning-of-the-year conference to select objectives and set specific performance indicators or criteria.
2. A variety of mechanisms to monitor progress on school objectives specifically and principal performance in general. These included school visits by the superintendent and other district office personnel, midyear review meetings, quarterly reporting conferences, and public reports to the board of education. Not all mechanisms were used in all districts.
3. An end-of-the-year evaluation conference. Principals in all the districts received formal, written evaluations, which were reviewed in this conference.

One of the most important features of the control systems seemed to be the degree to which all of the superintendents shaped the yearly objectives of principals, primarily by requiring school objectives to be coordinated with board or superintendent goals. In most of the districts principals were required to develop a corresponding objective for each district goal. Superintendents in the remaining districts were required to connect roughly half of their objectives to district goals and to develop an equal number of school-specific objectives.

Superintendents also used test results to control their principals' work agenda. Eight of the districts either formally (six) or informally (two) used student test score results to evaluate principals. Often, targets for student achievement were set in the initial evaluation conference. Principals were then held accountable for the success of the students in reaching those targets. The use of student test scores in the evaluation of principals in these districts is an important pattern because prior research has found that districts do not generally rely on this type of outcome measure (Peterson, 1983). Additionally, test scores controlled the objective development process for principals because results were generally aggregated to the district level and used as the basis for selecting many district goals. The district goals in turn formed the basis for establishing school objectives.

Superintendents used other mechanisms to control the content of principal evaluations including districtwide student learning objectives and "jawboning" techniques during evaluation conferences. Districtwide student learning expectancies controlled the selection of objectives because they often became performance indicators in school goals. Also, because five districts retained students who did not pass tests based on curriculum objectives, principals were under pressure to develop objectives indicating that high percentages of students would master core expectancies. Finally, superintendents influenced directly the content of the evaluation process during the evaluation conferences. They tended to have high expectations for student performance and were quick to point out when they thought principal performance objectives were either insufficient in scope or depth or when target levels were too low.

How accountable were the principals in these districts for their performance? Direct accountability was evidenced in a number of the written principal evaluations, which made regular references to progress on objectives. It was not uncommon in final evaluations for superintendents to indicate areas they expected to become performance objectives during the following year's evaluation cycle. Three superintendents indicated that they had placed principals in an "improvement mode," meaning that improvement was expected or the principal in question would be reassigned or terminated. During the last five years in these 12 districts, 20 principals had been reassigned to the classroom, forced to resign or retire early, transferred laterally, or demoted. Of these, 17 were for job-related causes, such as inadequate performance. Although we are unable to find comparable statistics for turnover in average districts, our experience leads us to believe that

a turnover in principalships of approximately 15 percent due to poor performance is probably higher than in average districts and is evidence of principal accountability in the evaluation process.

Although they used a variety of sources, superintendents tended to rely most often on quantifiable data and their own observations. They were receptive to information from any source that showed them how principals were progressing on their yearly objectives.

Conclusion

Although we believe this information can be useful to school administrators, it would be inappropriate to conclude that districts can improve simply by tightening the supervision and evaluation of principals. The paths to district effectiveness are probably multiple. We found several other controls that appear to be related to district effectiveness. Some—for instance, district goals—may be prerequisites for effective supervision and evaluation of principals. It is also possible that when other control mechanisms (such as socialization) are in place, supervision and evaluation of principals need not be as important as they appear to be in these districts. Finally, it is also likely that factors other than the ten we examined contribute to district effectiveness, for example, professionalism among administrators or a strong district culture. It is too early to assume that the supervision and evaluation of principals is the only way to accomplish district improvement.

Nevertheless, several characteristics of the principal supervision and evaluation processes are noteworthy in these effective school districts:

1. The overall pattern of supervision and evaluation differs from that found in many other districts. Procedures are clear and evaluation criteria well defined. A high degree of rationality is inherent in these systems—an attribute sorely lacking in many districts.

2. There is clear, consistent evidence that the supervision and evaluation functions are used as key mechanisms to link school and district offices. This direct coordination and control of principals is conspicuous by its absence in many districts.

3. Supervision and evaluation act not only as linkage mechanisms in their own right, but provide a strong base for the development of other potential linkage functions, especially goal setting and curriculum alignment. That is, these other functions may gain greater potency as coordinating mechanisms when channeled through the supervision and evaluation functions.

4. Given the rather low level of district management of instruction and curriculum reported in other studies, we were surprised to find that the supervision and evaluation of principals in these districts focused on these core activities rather than on the host of peripheral activities often reported in principal evaluations.

5. Principal evaluation in these districts appears to rely heavily on outcome controls, especially the evaluation of student achievement.

6. The superintendents are actively involved in the supervision and evaluation process in 11 of the effective districts and function as the primary supervisor in 10 of those 11. They act as highly visible leaders on school campuses, are intensely interested in curriculum and instructional matters, and spend a good deal of time supervising principals. They appear to be key agents in linking schools and district offices, a linkage not commonly reported in other studies.

Supervision and evaluation of principals are perfunctory activities in many districts. Our findings suggest that many successful school districts promote tighter coordination between district and site administrative staff. Future research should examine this interaction from the perspective of the principal. We believe that the results from this preliminary study on the supervision and evaluation of principals in effective school districts point the way toward improving these two important functions.□

[1]The ten control functions are selection, supervision, evaluation, staff development, rewarding and sanctioning of principals, goals, technological specifications, resource allocations, monitoring, and socialization.

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Joseph Murphy is Associate Professor of Educational Administration, Department of Administration, Higher, and Continuing Education, University of Illinois at Urbana-Champaign, 1310 South Sixth Street, Champaign, Illinois 61820. **Philip Hallinger** is Assistant Professor of Educational Administration and Leadership, St. John's University, Jamaica, New York 11432. **Kent D. Peterson** is Assistant Professor of Educational Administration, Vanderbilt University, Nashville, Tennessee 37202.

ELEANORE FISHER

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On Being Not Quite Ready to Retire

Even after 28 years, the rewards of the daily fray look attractive.

Photograph by Curtis Farnham

I am not quite ready to retire. I must admit I am peripherally attracted to those "get ready" articles in professional journals, and my school board offers attractive retirement incentives. I even attended a seminar in which a charming young woman tried to convince me that my tax bracket would be decreased and I could live comfortably for the rest of my life if only I chose the right option at the right time. But somehow those messages don't move me. I'm less tempted by glorious visions of a secure leisure than I am by the daily excitement of the carnival called school. I love going to school every morning, and I still get a kick out of hobnobbing with healthy, high-strung, unpredictable kids in their ridiculous earrings and haircuts and bizarre outfits.

I look forward to what each day will bring: Can I solve its inevitable problems? Will I be able to complete yet another state education department report, with 15 copies due in two weeks? (Who are those 15 people in Albany who read all this junk, I wonder.) Will an irate or a grateful or a confused parent seek my counsel today? Will the air conditioning work in my windowless office? Will the mail bring new challenges and maybe some good news? Will my faithful secretary proudly announce that we've conquered all the bedeviling bugs in our computer? Will colleagues, in and out of my office all day, bring tidbits of gossip, important educational information, professional news about a curriculum or a personnel issue we're working on? Will the handicapped students and their teachers, who are my special responsibility, make my day great or grim? Will the superintendent call with another exciting project she wants me to work on?

You see my problem—too much is going on. Yet I want to say some things in print (meaning in public) that I would say if I *were* retiring. Who knows? At this rate I may be too old to write when I finally decide to go.

Unexpected Rewards

I want to say what it has meant to me to spend my professional life as an educator in the public schools, to convey the truly inexplicable, incomparable exultation I felt when I taught a pipsqueak of a child how to read. I want others to know the pride I felt when one of my students was accepted by an Ivy League college—a student

who learned to cope with long division because I tutored her during recess so that other students would not know how scared she was of math. And what about the child who reversed d's and b's and who was so embarrassed to read that he kept sinking further and further into the woodwork? What about all those hours of patient cajoling it took to convince him and his parents that he had a problem and needed a special program? And then I found just the right placement for him, and finally he began to succeed. What about the high school valedictorian who told me on graduation night that she remembered the first day she saw me in 3rd grade wearing my kelly green dress, and every time she sees that color she thinks about me and that class. And the note I found on my car one day from a mother who admonished me for driving with a dirty windshield. She cleaned it for me, she said, because I had opened the windows on the world for her twins. And the local orthodontist who refused to charge for my son's braces, because he said there was no way to repay me for introducing his 1st grader (now a college sophomore) to the love of school, books, learning, goal setting, and achievement. And the student who, when assigned to write a Christmas wish list for the future, wished she could grow up to be Mrs. Fisher.

Who knew these things would happen to me? Whoever expected such rewards? I knew I wanted to spend my life in intellectual pursuits, working with children. I knew I wanted a career that would allow me time and energy to be a wife and mother. I knew I wanted a career that wasn't driven by the profit motive. I didn't want to exploit people in order to earn a living, and I'm not crazy about competition. I wanted a profession in which I could keep growing—intellectually, socially, and morally.

Who bargained for such payoffs? Who knew I'd fall in love with thousands of children? Who knew I'd end up feeling young—because you can't stay on their wavelength or "dig" them if you feel old? If you don't consider them funny, eccentric, lovable, irascible, terrible, sharing, selfish, ethical, self-doubting, boastful, and challenging—to name a few—you'll end up burned out, dissatisfied, overworked, and underappreciated.

The Drawbacks

Teaching hasn't been all wonderful, of course. Some terrible soul-searching mornings I was caught between my own daughter—coughing and wanting Mommy to stay home with her—and 23 students primed for a field trip they couldn't take without me. Occasionally "idiot" proclamations from on high forced me to use strategies in my classes that I considered educationally unsound.

There were some children, parents, and colleagues whose concepts of right and wrong were diametrically opposed to my own. And I believe even now, as an administrator with a good salary, that my compensation is considerably less than it would have been in industry or in almost any other comparable profession. I also believe that, in the world outside public school, I never had much status as a teacher. It's a shame that I had to leave the classroom for that.

There were fights I couldn't settle, students I couldn't help, mothers who thought I was too soft or too strict, and fathers who thought I gave too much homework or not enough. There were students I didn't like and who didn't like me, rules I obeyed that I disapproved of, and incompetence and unfairness that were beyond my purview but bothered my conscience. There was that big, strong high school senior who cried in my office because, despite all of my training, expertise, contacts, and counseling, I just couldn't influence his first choice college to accept him. There was the time I had to call Child Protective Services and the time I found my favorite 12-year-old stealing from my wallet. And there were some four o'clock Friday afternoons when I was so exhausted and tired of marking papers that I wanted to chuck the whole thing.

Reflections and a Look Ahead

But then it was Monday morning, 28 years later. I had gone from teacher to counselor to administrator, all in the same district. I had worked with dozens of board members, five superintendents, countless teachers and principals, and hundreds of children. Oh those children—so eager, so dear, so curious—who wanted to like and be liked, to respect and be respected, to appreciate and be appreciated.

I have been more than lucky. I work in a community whose main concern is its school system. Despite changes in population, increases and then decreases in enrollment, swings of the educational pendulum—from the lackluster '50s to the innovative '60s to the back-to-basics '70s to the education-at-risk '80s—this district has been beamed toward excellence. This district has honored me. It has encouraged my growth, rewarded my ambition, and recognized my zeal and commitment. Along the fast trip from 1957 to 1986, I have received enough accolades, thank you's, and strokes to last a lifetime.

Because of my help, lots of students can read, count, and write; they are making their way in the world. Because of my help, lots of kids and parents with problems were able to deal with growing up and adolescence. Because of my help, special education and handicapped children are getting a fair shake at an appropriate free education. There's enough stuff here and enough years here to make up a dandy retirement package.

As you can see, I have my retirement speech practically all written. But how can I retire? The phone is ringing; the problems keep pouring in; three people are waiting to see me. We have to get the "jocks" to be more humble. We have to get other students off drugs and high on life. We have to design meaningful ways for teachers and students to accept and integrate handicapped children into the mainstream of school life.

We have to ensure computer availability and literacy for all our students. We have to institute all-day kindergarten and after-school centers for children with working and single parents. We have to work with industry to develop effective vocational options for high school graduates. We have to improve the math and science curriculum for all students. We have to make America's public schools the best they can be.

There's so much to do. I don't have time to retire right now.□

Eleanore Fisher is director, Office of Special Services, Briarcliff Public Schools, 444 Pleasantville Rd., Briarcliff Manor, NY 10510.

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and Curriculum Development